

# Prof. MİTHAT KAYA

## Personal Information

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## International Researcher IDs

ScholarID: 19pZ-JAAAAAJ

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Publons / Web Of Science ResearcherID: D-8062-2011

ScopusID: 26032604700

Yoksis Researcher ID: 7870

## Education Information

Doctorate, The University of Iowa, Yuksek Enerji Fizigi, United States Of America 1997 - 2000

Postgraduate, The University of Iowa, Yuksek Enerji Fizigi, United States Of America 1994 - 1997

Postgraduate, Istanbul Technical University, Fen-Edebiyat, Fizik Mühendisliği, Turkey 1992 - 1993

Undergraduate, Istanbul University, Faculty Of Science, Department Of Physics, Turkey 1988 - 1992

## Foreign Languages

English, B2 Upper Intermediate

## Dissertations

Doctorate, Ds Charm Strange Meson Production and Asymmetry, The University Of Iowa, Yuksek Enerji Fizigi, 2000

Postgraduate, MULTIWIRED PROPORTIONAL CHAMBERS IN M1 AND M3 SPECTROMETERS OF CHARMED BARYON EXPERIMENT(E781) AT FERMILAB, The University Of Iowa, Yuksek Enerji Fizigi, 1997

## Research Areas

Physics, Natural Sciences

## Academic Titles / Tasks

Professor, Marmara University, Faculty of Arts and Sciences, Physics, 2014 - Continues

Professor, Kafkas University, Faculty Of Arts And Sciences, Department Of Physics, 2011 - 2014

Associate Professor, Kafkas University, Faculty Of Arts And Sciences, Department Of Physics, 2005 - 2011

## Academic and Administrative Experience

Fakülte Kurulu Üyesi, Marmara University, Faculty Of Sciences, Department Of Physics, 2022 - Continues  
Head of Department, Marmara University, Faculty Of Sciences, Department Of Physics, 2022 - Continues  
Head of Department, Marmara University, Faculty of Sciences, Department of Physics, 2022 - Continues  
Head of Department, Marmara University, Faculty Of Arts And Sciences, Physics, 2017 - 2020  
Head of Department, Marmara University, Faculty Of Arts And Sciences, Physics, 2014 - 2017  
Head of Department, Kafkas University, Fen Edebiyat Fakültesi, Fizik, 2012 - 2015  
Member of the Senate, Kafkas University, Faculty Of Science And Letters, Department Of Physics, 2012 - 2014  
BAP Scientific Commissioner, Kafkas University, Faculty Of Science And Letters, Department Of Physics, 2011 - 2014  
Head of Department, Kafkas University, Fen Edebiyat, Fizik, 2011 - 2014  
Fakülte Kurulu Üyesi, Kafkas University, Faculty Of Arts And Sciences, Department Of Physics, 2001 - 2014  
Assistant Director of the Institute, Kafkas University, Faculty Of Science And Letters, Department Of Physics, 2006 - 2011

## Courses

Introduction to Particle Physics, Undergraduate, 2021 - 2022  
High Energy Physics, Postgraduate, 2021 - 2022, 2019 - 2020  
Physics II, Undergraduate, 2020 - 2021  
Physics III, Undergraduate, 2019 - 2020  
Thermodynamic, Undergraduate, 2019 - 2020  
Introduction to Detector Physics, Undergraduate, 2019 - 2020  
Advanced Electromagnetic Theory, Doctorate, 2017 - 2018

## Advising Theses

Kaya M., Machine Learning Techniques for JetMET Data Certification of the CMS Detector at CERN, Postgraduate, J.AYMAN(Student), 2023  
Kaya M., Measurement of gluon jet cross section in CMS detector in proton-proton collisions at  $\sqrt{s} = 13$  TeV, Doctorate, İ.OKAN(Student), 2023  
Kaya M., Electroweak phase transition in the early universe, Doctorate, S.GÜYER(Student), 2023  
Kaya M., Doğu Anadolu Gözlemevi (DAG) Yerleşkesi'nde Kozmik Işımların Tespiti ve Astronomik Aygıtlarına Etkisi, Doctorate, A.POLATOĞLU(Student), 2022  
Kaya M., Inclusive Jet pT Cross Section Measurement at  $\sqrt{s} = 13$  TeV with Low Pile-Up Data in the CERN-CMS experiment, Doctorate, S.TEKTEN(Student), 2022  
Kaya M., Mechanisms of mass generation for neutrinos in non-supersymmetric guts based on SU(5), Postgraduate, E.YAZICI(Student), 2021  
KAYA M., Kars bölgesindeki kozmik ışın akı yoğunluğu, Postgraduate, M.ATAKAN(Student), 2014  
KAYA M., Açık hava kozmik ışın dedektörleri için SİPM kazanç krakteristiği ve kalibrasyonu, Postgraduate, İ.OKAN(Student), 2014  
KAYA M., CMS-HF dedektörlerinin yenilenmesinde kullanılacak fotoçoğaltıcı tüplerin e- ve - sınama demetleri ile analizi, Postgraduate, S.TEKTEN(Student), 2012  
KAYA M., Tauwer deneyinde kullanılacak prototipin sonuçları, Postgraduate, E.KURT(Student), 2011  
KAYA M., CORSİKA simülasyon programı ile farklı enerjilerdeki tau parçacıklarının üretilmesi, Postgraduate, G.MERHAN(Student), 2010  
KAYA M., Alpgen simülasyonu ile top kuarkın üretilmesi, Postgraduate, G.TAŞTAN(Student), 2009  
KAYA M., Kompakt müon selonoid cern deneyinde hadronik sonbaşlık kalorimetresinin müon kalibrasyonu, Postgraduate, Ö.KAYA(Student), 2008  
KAYA M., Deniz seviyesinde kozmik ışın akı oranı ve uçuş zamanının bir sintilasyon dedektörü ile tespit edilmesi, Postgraduate, A.YILDIZ(Student), 2008  
KAYA M., An object-oriented data analysis framework (ROOT) ve CMS-CERN deneyinde HF dedektörleri ile ilgili kaynak

data analizi, Postgraduate, S.JULU(Student), 2006

KAYA M., CMS deneyinde kullanılan HF dedektörlerinin enerji lineerliği ve enerji çözünürlüğü, Postgraduate, Ş.BÜLBÜL(Student), 2004

## Jury Memberships

Competition, Teknofest 2020 Gaziantep, Marmara University, October, 2020

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Search for medium effects using jets from bottom quarks in PbPb collisions at  $s_{NN}=5.02\text{TeV}$**   
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.844, 2023 (SCI-Expanded)
- II. **Two-particle azimuthal correlations in  $\gamma p$  interactions using pPb collisions at  $s_{NN}=8.16\text{TeV}$**   
Tumasyan A., Adam W., Bergauer T., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., Liko D., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.844, 2023 (SCI-Expanded)
- III. **Search for new heavy resonances decaying to WW, WZ, ZZ, WH, or ZH boson pairs in the all-jets final state in proton-proton collisions at  $s=13\text{TeV}$**   
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.844, 2023 (SCI-Expanded)
- IV. **Evidence for four-top quark production in proton-proton collisions at  $s=13\text{TeV}$**   
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.844, 2023 (SCI-Expanded)
- V. **Search for a heavy composite Majorana neutrino in events with dilepton signatures from proton-proton collisions at  $s=13\text{TeV}$**   
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.843, 2023 (SCI-Expanded)
- VI. **Measurement of the  $B_s^0 \rightarrow \mu^+ \mu^-$  decay properties and search for the  $B^0 \rightarrow \mu^+ \mu^-$  decay in proton-proton collisions at  $s=13\text{TeV}$**   
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.842, 2023 (SCI-Expanded)
- VII. **Search for electroweak production of charginos and neutralinos at  $s=13\text{TeV}$  in final states containing hadronic decays of WW, WZ, or WH and missing transverse momentum**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.842, 2023 (SCI-Expanded)
- VIII. **Search for Higgs boson decays into Z and  $J/\psi$  and for Higgs and Z boson decays into  $J/\psi$  or Y pairs in pp collisions at  $s=13\text{TeV}$**   
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.842, 2023 (SCI-Expanded)
- IX. **Precision measurement of the Z boson invisible width in pp collisions at  $s=13\text{TeV}$**   
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle

- A., Frühwirth R., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.842, 2023 (SCI-Expanded)
- X. **Search for nonresonant Higgs boson pair production in final state with two bottom quarks and two tau leptons in proton-proton collisions at  $s=13$  TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.842, 2023 (SCI-Expanded)
- XI. **Search for a massive scalar resonance decaying to a light scalar and a Higgs boson in the four b quarks final state with boosted topology**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.842, 2023 (SCI-Expanded)
- XII. **CMS pythia 8 colour reconnection tunes based on underlying-event data**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Frühwirth R., Jeitler M., et al.  
European Physical Journal C, vol.83, no.7, 2023 (SCI-Expanded)
- XIII. **Measurement of the mass dependence of the transverse momentum of lepton pairs in Drell-Yan production in proton-proton collisions at  $\sqrt{s}=13$ TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Valle A. E. D., Frühwirth R., Jeitler M., Krammer N., et al.  
European Physical Journal C, vol.83, no.7, 2023 (SCI-Expanded)
- XIV. **Observation of electroweak  $W+W-$  pair production in association with two jets in proton-proton collisions at  $s=13$ TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.841, 2023 (SCI-Expanded)
- XV. **Observation of triple  $J/\psi$  meson production in proton-proton collisions**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.  
Nature Physics, vol.19, no.3, pp.338-350, 2023 (SCI-Expanded)
- XVI. **Search for new particles in an extended Higgs sector with four b quarks in the final state at  $s=13$ TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.835, 2022 (SCI-Expanded)
- XVII. **Nuclear modification of Y states in pPb collisions at  $s_{NN}=5.02$ TeV**  
Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Flechl M., Frühwirth R., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.835, 2022 (SCI-Expanded)
- XVIII. **Evidence for  $WW/WZ$  vector boson scattering in the decay channel  $\ell\nu qq$  produced in association with two jets in proton-proton collisions at  $s=13$  TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.834, 2022 (SCI-Expanded)
- XIX. **Measurement of the Higgs boson width and evidence of its off-shell contributions to ZZ production**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.  
Nature Physics, vol.18, no.11, pp.1329-1334, 2022 (SCI-Expanded)
- XX. **Search for a  $W'$  boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state at  $\sqrt{s} = 13$  TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R.,

- Jeitler M., Krammer N., et al.  
Journal of High Energy Physics, vol.2022, no.9, 2022 (SCI-Expanded)
- XXI. **Search for high-mass resonances decaying to a jet and a Lorentz-boosted resonance in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.  
PHYSICS LETTERS B, vol.832, 2022 (SCI-Expanded)
- XXII. **Strategies and performance of the CMS silicon tracker alignment during LHC Run 2**  
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Bloch D., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Hinger V., et al.  
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.1037, 2022 (SCI-Expanded)
- XXIII. **Measurement of the Drell-Yan forward-backward asymmetry at high dilepton masses in proton-proton collisions at  $\sqrt{s} = 13$  TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.  
Journal of High Energy Physics, vol.2022, no.8, 2022 (SCI-Expanded)
- XXIV. **Search for Resonances Decaying to Three W Bosons in Proton-Proton Collisions at  $s = 13$  TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.  
Physical Review Letters, vol.129, no.2, 2022 (SCI-Expanded)
- XXV. **Probing Charm Quark Dynamics via Multiparticle Correlations in Pb-Pb Collisions at  $s_{NN} = 5.02$  TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.  
Physical Review Letters, vol.129, no.2, 2022 (SCI-Expanded)
- XXVI. **Search for new physics in the lepton plus missing transverse momentum final state in proton-proton collisions at  $\sqrt{s} = 13$  TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.  
Journal of High Energy Physics, vol.2022, no.7, 2022 (SCI-Expanded)
- XXVII. **Measurement of the inclusive and differential WZ production cross sections, polarization angles, and triple gauge couplings in pp collisions at  $\sqrt{s} = 13$  TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.  
Journal of High Energy Physics, vol.2022, no.7, 2022 (SCI-Expanded)
- XXVIII. **Search for resonances decaying to three W bosons in the hadronic final state in proton-proton collisions at  $s = 13$  TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.  
Physical Review D, vol.106, no.1, 2022 (SCI-Expanded)
- XXIX. **First Search for Exclusive Diphoton Production at High Mass with Tagged Protons in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV**  
Tumasyan A., Adam W., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., Lechner L., et al.  
PHYSICAL REVIEW LETTERS, vol.129, no.1, 2022 (SCI-Expanded)
- XXX. **Search for long-lived heavy neutral leptons with displaced vertices in proton-proton collisions at  $\sqrt{s} = 13$  TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.  
Journal of High Energy Physics, vol.2022, no.7, 2022 (SCI-Expanded)
- XXXI. **Search for Flavor-Changing Neutral Current Interactions of the Top Quark and Higgs Boson in Final**

### **States with Two Photons in Proton-Proton Collisions at root s=13 TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

PHYSICAL REVIEW LETTERS, vol.129, no.3, 2022 (SCI-Expanded)

XXXII. **Observation of B-s(0) mesons and measurement of the B-s(0)/B+ yield ratio in PbPb collisions at root S-NN=5.02 TeV**

Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

PHYSICS LETTERS B, vol.829, 2022 (SCI-Expanded)

XXXIII. **Search for resonant production of strongly coupled dark matter in proton-proton collisions at 13 TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

Journal of High Energy Physics, vol.2022, no.6, 2022 (SCI-Expanded)

XXXIV. **Observation of the B-c(+) Meson in Pb-Pb and pp Collisions at root s(NN)=5.02 TeV and Measurement of its Nuclear Modification Factor**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

PHYSICAL REVIEW LETTERS, vol.128, no.25, 2022 (SCI-Expanded)

XXXV. **Search for charged-lepton flavor violation in top quark production and decay in pp collisions at  $\sqrt{s} = 13$  TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Journal of High Energy Physics, vol.2022, no.6, 2022 (SCI-Expanded)

XXXVI. **Analysis of the CP structure of the Yukawa coupling between the Higgs boson and  $\tau$  leptons in proton-proton collisions at  $\sqrt{s} = 13$  TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Journal of High Energy Physics, vol.2022, no.6, 2022 (SCI-Expanded)

XXXVII. **Inclusive nonresonant multilepton probes of new phenomena at root s=13 TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., et al.

PHYSICAL REVIEW D, vol.105, no.11, 2022 (SCI-Expanded)

XXXVIII. **Measurement of the production cross section for Z plus b jets in proton-proton collisions at root s=13 TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., et al.

PHYSICAL REVIEW D, vol.105, no.9, 2022 (SCI-Expanded)

XXXIX. **Search for single production of a vector-like T quark decaying to a top quark and a Z boson in the final state with jets and missing transverse momentum at  $\sqrt{s} = 13$  TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Journal of High Energy Physics, vol.2022, no.5, 2022 (SCI-Expanded)

XL. **Search for heavy resonances decaying to a pair of Lorentz-boosted Higgs bosons in final states with leptons and a bottom quark pair at root s=13 TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.5, 2022 (SCI-Expanded)

XLI. **Measurement of the inclusive and differential  $t\bar{t}\gamma$  cross sections in the dilepton channel and effective field theory interpretation in proton-proton collisions at  $\sqrt{s} = 13$  TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle

- A., Frühwirth R., Jeitler M., et al.  
Journal of High Energy Physics, vol.2022, no.5, 2022 (SCI-Expanded)
- XLII. **Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at root s=13 TeV**  
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.5, 2022 (SCI-Expanded)
- XLIII. **Search for invisible decays of the Higgs boson produced via vector boson fusion in proton-proton collisions at s =13 TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.  
Physical Review D, vol.105, no.9, 2022 (SCI-Expanded)
- XLIV. **Observation of  $B \rightarrow \psi(2S)K S0\pi^+\pi^-$  and  $B s0 \rightarrow \psi(2S)K S0$  decays**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Frühwirth R., Jeitler M., et al.  
European Physical Journal C, vol.82, no.5, 2022 (SCI-Expanded)
- XLV. **Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating nonresonant ZZ or ZH production at  $\sqrt{s} = 13$  TeV**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.  
Journal of High Energy Physics, vol.2022, no.4, 2022 (SCI-Expanded)
- XLVI. **Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at  $\sqrt{s}=13$ TeV**  
Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Valle A. E. D., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.  
European Physical Journal C, vol.82, no.4, 2022 (SCI-Expanded)
- XLVII. **Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at root s=13 TeV**  
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.4, 2022 (SCI-Expanded)
- XLVIII. **Measurement of the inclusive  $t(\bar{t})$  production cross section in proton-proton collisions at root s=5.02 TeV**  
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Krammer N., Lechner L., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.4, 2022 (SCI-Expanded)
- XLIX. **Search for a heavy resonance decaying into a top quark and a W boson in the lepton plus jets final state at root s=13 TeV**  
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.  
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- L. **Search for long-lived particles decaying into muon pairs in proton-proton collisions at  $\sqrt{s} = 13$  TeV collected with a dedicated high-rate data stream**  
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- LII. **Search for electroweak production of charginos and neutralinos in proton-proton collisions at  $\sqrt{s} = 13$  TeV**  
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- LIV. **Using Z Boson Events to Study Parton-Medium Interactions in Pb-Pb Collisions**  
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- LV. **Study of dijet events with large rapidity separation in proton-proton collisions at  $\sqrt{s} = 2.76$  TeV**  
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- LVI. **A new calibration method for charm jet identification validated with proton-proton collision events at  $\sqrt{s} = 13$  TeV**  
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- LIX. **<p>Search for W resonances in proton-proton collisions at  $\sqrt{s} = 13$  TeV using hadronic decays of Lorentz-boosted W bosons</p>**  
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- LX. **Measurement of  $W \pm \gamma$  differential cross sections in proton-proton collisions at  $s = 13$  TeV and effective field theory constraints**  
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- LXI. **Measurement of the Inclusive and Differential Higgs Boson Production Cross Sections in the Decay Mode to a Pair of  $\tau$  Leptons in pp Collisions at  $s = 13$  TeV**  
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- LXII. **Fragmentation of jets containing a prompt J/psi meson in PbPb and pp collisions at  $\sqrt{s(NN)} = 5.02$  TeV**  
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- LXV. **Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at  $\sqrt{s} = 13$  TeV**  
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- LXVIII. **Evidence for X(3872) in Pb-Pb Collisions and Studies of its Prompt Production at  $\sqrt{s_{NN}} = 5.02$  TeV**  
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- LXX. **Measurement of double-parton scattering in inclusive production of four jets with low transverse momentum in proton-proton collisions at  $\sqrt{s} = 13$  TeV**  
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- LXXI. **Search for Long-Lived Particles Decaying in the CMS End Cap Muon Detectors in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV**  
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- LXXII. **Measurement of the top quark mass using events with a single reconstructed top quark in pp collisions at  $\sqrt{s}=13$  TeV**  
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- LXXIII. **Probing effective field theory operators in the associated production of top quarks with a Z boson**

**in multilepton final states at root  $s=13$  TeV**

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**LXXIV. Search for a heavy resonance decaying to a top quark and a W boson at root  $s=13$  TeV in the fully hadronic final state**

Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., Lechner L., et al.

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**LXXV. Measurement of the inclusive and differential  $t(\bar{t})$  over-bar gamma cross sections in the single-lepton channel and EFT interpretation at root  $s=13$  TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

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**LXXVI. Measurement of prompt open-charm production cross sections in proton-proton collisions at root  $s=13$  TeV**

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**LXXVII. Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at  $\sqrt{s}=13$  Te**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

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**LXXVIII. Measurements of the Electroweak Diboson Production Cross Sections in Proton-Proton Collisions at root  $s=5.02$  TeV Using Leptonic Decays**

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**LXXIX. Search for new particles in events with energetic jets and large missing transverse momentum in proton-proton collisions at root  $s=13$  TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

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**LXXX. Search for a heavy Higgs boson decaying into two lighter Higgs bosons in the tau tau bb final state at 13TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

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**LXXXI. Observation of  $tW$  production in the single-lepton channel in pp collisions at root  $s=13$  TeV**

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**LXXXII. Measurement of differential  $t(\bar{t})$  over-bar production cross sections in the full kinematic range using lepton plus jets events from proton-proton collisions at root  $s=13$  TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

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**LXXXIII. Search for chargino-neutralino production in events with Higgs and W bosons using 137 fb<sup>-1</sup> of proton-proton collisions at root  $s=13$  TeV**

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- LXXXV. **Measurements of the  $pp \rightarrow W^{+/-}\gamma\gamma$  and  $pp \rightarrow Z\gamma\gamma$  cross sections at  $\sqrt{s}=13$  TeV and limits on anomalous quartic gauge couplings**  
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- LXXXVI. **Measurement of the electroweak production of Z gamma and two jets in proton-proton collisions at  $\sqrt{s}=13$  TeV and constraints on anomalous quartic gauge couplings**  
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- LXXXVII. **Search for long-lived particles decaying to jets with displaced vertices in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., Lechner L., et al.  
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- LXXXVIII. **Observation of Forward Neutron Multiplicity Dependence of Dimuon Acoplanarity in Ultraperipheral Pb-Pb Collisions at  $\sqrt{s_{NN}}=5.02$  TeV**  
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- LXXXIX. **Constraints on anomalous Higgs boson couplings to vector bosons and fermions in its production and decay using the four-lepton final state**  
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- XC. **Search for top squark production in fully hadronic final states in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- XCI. **First measurement of the cross section for top quark pair production with additional charm jets using dileptonic final states in pp collisions at  $\sqrt{s}=13$  TeV**  
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- XCII. **Precision luminosity measurement in proton-proton collisions at  $\sqrt{s}=13$  TeV in 2015 and 2016 at CMS**  
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- XCIII. **Search for  $W'$  bosons decaying to a top and a bottom quark at  $\sqrt{s}=13$  TeV in the hadronic final state**  
Sirunyan A. M., Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., et al.

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**XCV. Measurements of angular distance and momentum ratio distributions in three-jet and Z + two-jet final states in pp collisions**

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Valle A. E. D., Frühwirth R., Jeitler M., Krammer N., et al.

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**XCVI. Measurement of the azimuthal anisotropy of Y(1S) and Y(2S) mesons in PbPb collisions at root s(NN)=5.02 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Frühwirth R., et al.

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**XCVII. Search for the rare decay of the W boson into a pion and a photon in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.

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**XCVIII. Search for singly and pair-produced leptoquarks coupling to third-generation fermions in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.

PHYSICS LETTERS B, vol.819, 2021 (SCI-Expanded)

**XCVIII. Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**

Sirunyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.

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**XCIX. Search for lepton-flavor violating decays of the Higgs boson in the mu tau and e tau final states in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.

PHYSICAL REVIEW D, vol.104, no.3, 2021 (SCI-Expanded)

**C. Constraints on the Initial State of Pb-Pb Collisions via Measurements of Z-Boson Yields and Azimuthal Anisotropy at root s(NN)=5.02 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Frühwirth R., Jeitler M., et al.

PHYSICAL REVIEW LETTERS, vol.127, no.10, 2021 (SCI-Expanded)

**CI. Search for a heavy vector resonance decaying to a Z boson and a Higgs boson in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Valle A. E. D., Frühwirth R., Jeitler M., Krammer N., et al.

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**CII. Search for top squarks in final states with two top quarks and several light-flavor jets in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.

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**CIII. Hard color-singlet exchange in dijet events in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Frühwirth R., Jeitler M., et al.

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**CIV. Performance of the CMS muon trigger system in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., Lechner L., et al.

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- CV. **Search for long-lived particles using displaced jets in proton-proton collisions at root s=13 TeV**  
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- CVI. **Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CVII. **MUSiC: a model-unspecific search for new physics in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Erö J., Del Valle A. E., Frühwirth R., Jeitler M., et al.  
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- CVIII. **Search for resonant and nonresonant new phenomena in high-mass dilepton final states at root s=13 TeV**  
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- CIX. **Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
Sirunyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Valle A. E. D., Frühwirth R., Jeitler M., et al.  
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- CX. **Measurement of the W gamma Production Cross Section in Proton-Proton Collisions at root s=13 TeV and Constraints on Effective Field Theory Coefficients**  
Sirunyan A. M., Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., et al.  
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- CXI. **Observation of a New Excited Beauty Strange Baryon Decaying to Xi(-)(b)pi(+)(b)pi(-)**  
Sirunyan A. M., Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., et al.  
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- CXII. **Study of Drell-Yan dimuon production in proton-lead collisions at root s(NN)=8.16 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CXIII. **Measurement of b jet shapes in proton-proton collisions at root s=5.02 TeV**  
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- CXIV. **Measurement of the CP-violating phase phi(s) in the B-s(0) -> J/psi phi(1020) -> mu(+)(b)mu-K+K-channel in proton-proton collisions at root s=13 TeV**  
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- CXVI. **Measurement of prompt D-0 and D-0 meson azimuthal anisotropy and search for strong electric fields in PbPb collisions at root S-NN=5.02 TeV**  
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- CXVII. **Electron and photon reconstruction and identification with the CMS experiment at the CERN LHC**  
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- CXVIII. **Measurement of the Z boson differential production cross section using its invisible decay mode ( $Z \rightarrow \nu(\nu)\text{-over-bar}$ ) in proton-proton collisions at root s=13 TeV**  
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- CXXI. **Angular analysis of the decay  $B^{+-} \rightarrow K^{*}(892)(+)\mu^{+}\mu^{-}$  in proton-proton collisions at root s=8 TeV**  
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- CXXII. **Search for supersymmetry in final states with two oppositely charged same-flavor leptons and missing transverse momentum in proton-proton collisions at root s=13 TeV**  
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- CXXVII. **Search for nonresonant Higgs boson pair production in final states with two bottom quarks and two photons in proton-proton collisions at root s=13 TeV**

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- CXXVIII. **Measurement of differential  $t(\bar{t})$  over-bar production cross sections using top quarks at large transverse momenta in pp collisions at  $\sqrt{s}=13$  TeV**  
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- CXXXII. **The very forward CASTOR calorimeter of the CMS experiment**  
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- CXXXIII. **Measurements of production cross sections of polarized same-sign W boson pairs in association with two jets in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CXXXIV. **Correlations of azimuthal anisotropy Fourier harmonics with subevent cumulants in pPb collisions at  $\sqrt{s(NN)}=8.16$  TeV**  
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- CXXXV. **Search for the lepton flavor violating decay  $\tau \rightarrow 3 \mu$  in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CXXXVII. **Evidence for electroweak production of four charged leptons and two jets in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CXXXVIII. **Evidence for Higgs boson decay to a pair of muons**  
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- CXXXIX. **Search for top squark pair production using dilepton final states in pp collision data collected at  $\sqrt{s}=13\text{TeV}$**   
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- CXLII. **Inclusive search for highly boosted Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at  $\sqrt{s}=13\text{ TeV}$**   
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- CXLIII. **Measurement of single-diffractive dijet production in proton-proton collisions at  $\sqrt{s}=8\text{TeV}$  with the CMS and TOTEM experiments**  
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- CXLIV. **Observation of electroweak production of W gamma with two jets in proton-proton collisions at root s=13 TeV**  
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- CXLV. **Measurement of B-c(2S)(+) and B-c\*(2S)(+) cross section ratios in proton-proton collisions at root s=13 TeV**  
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- CXLVI. **Measurement of the top quark Yukawa coupling from  $t(\bar{t})$  kinematic distributions in the dilepton final state in proton-proton collisions at root s=13 TeV**  
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- CXLVII. **W+ W- boson pair production in proton-proton collisions at root s=13 TeV**  
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PHYSICAL REVIEW D, vol.102, no.9, 2020 (SCI-Expanded)
- CXLVIII. **Measurements of the W boson rapidity, helicity, double-differential cross sections, and charge asymmetry in pp collisions at root s=13 TeV**



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**CXLIX. Evidence for Top Quark Production in Nucleus-Nucleus Collisions**

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**CL. Investigation into the event-activity dependence of gamma(nS) relative production in proton-proton collisions at root s=7 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.  
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**CLI. Search for decays of the 125 GeV Higgs boson into a Z boson and a rho or phi meson**

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**CLII. Performance of the CMS Level-1 trigger in proton-proton collisions at root s=13 TeV**

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**CLIII. Observation of the Production of Three Massive Gauge Bosons at root s=13 TeV**

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PHYSICAL REVIEW LETTERS, vol.125, no.15, 2020 (SCI-Expanded)

**CLIV. Measurements of production cross sections of WZ and same-sign WW boson pairs in association with two jets in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.  
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**CLV. Reconstruction of signal amplitudes in the CMS electromagnetic calorimeter in the presence of overlapping proton-proton interactions**

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**CLVI. Search for a light charged Higgs boson in the H-+/- -> cs channel in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.  
PHYSICAL REVIEW D, vol.102, no.7, 2020 (SCI-Expanded)

**CLVII. Observation of the B-s(0) -> X(3872)phi Decay**

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**CLVIII. Studies of Charm Quark Diffusion inside Jets Using Pb-Pb and pp Collisions at root s(NN)=5.02 TeV**

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**CLIX. Measurement of CKM matrix elements in single top quark t-channel production in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., Flechl M., et al.

- PHYSICS LETTERS B, vol.808, 2020 (SCI-Expanded)
- CLX. **Search for supersymmetry in proton-proton collisions at  $\sqrt{s}=13$  TeV in events with high-momentum Z bosons and missing transverse momentum**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., et al.  
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- CLXI. **Pileup mitigation at CMS in 13 TeV data**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., Flechl M., et al.  
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- CLXII. **Measurement of the  $Y(1S)$  pair production cross section and search for resonances decaying to  $Y(1S)\mu^{+}\mu^{-}$  in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., Flechl M., et al.  
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- CLXIII. **Search for resonant pair production of Higgs bosons in the  $bbZZ$  channel in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., et al.  
PHYSICAL REVIEW D, vol.102, no.3, 2020 (SCI-Expanded)
- CLXIV. **Measurements of  $(t\bar{t})\gamma$  Production and the CP Structure of the Yukawa Interaction between the Higgs Boson and Top Quark in the Diphoton Decay Channel**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.  
PHYSICAL REVIEW LETTERS, vol.125, no.6, 2020 (SCI-Expanded)
- CLXV. **Search for a light pseudoscalar Higgs boson in the boosted  $\mu\mu\tau\tau$  final state in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.  
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- CLXVI. **Search for physics beyond the standard model in events with jets and two same-sign or at least three charged leptons in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Flechl M., Frühwirth R., et al.  
European Physical Journal C, vol.80, no.8, 2020 (SCI-Expanded)
- CLXVII. **Measurement of the associated production of a Z boson with charm or bottom quark jets in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., Flechl M., et al.  
PHYSICAL REVIEW D, vol.102, no.3, 2020 (SCI-Expanded)
- CLXVIII. **Study of central exclusive [Equation not available: see fulltext.] production in proton-proton collisions at  $\sqrt{s}=5.02$  and 13 TeV**  
Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., Flechl M., et al.  
European Physical Journal C, vol.80, no.8, 2020 (SCI-Expanded)
- CLXIX. **Combination of the W boson polarization measurements in top quark decays using ATLAS and CMS data at  $\sqrt{s}=8$  TeV**  
Aad G., Abbott B., Abbott D. C., Abud A. A., Abeling K., Abhayasinghe D. K., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.8, 2020 (SCI-Expanded)
- CLXX. **Measurement of  $t(\bar{t})$  normalised multi-differential cross sections in pp collisions at  $\sqrt{s}=13$  TeV**

**$s=13$  TeV, and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.80, no.7, 2020 (SCI-Expanded)

**CLXXI. Search for disappearing tracks in proton-proton collisions at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.

PHYSICS LETTERS B, vol.806, 2020 (SCI-Expanded)

**CLXXII. Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.7, 2020 (SCI-Expanded)

**CLXXIII. Measurement of the cross section for  $t(\bar{t})$  production with additional jets and b jets in pp collisions at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.7, 2020 (SCI-Expanded)

**CLXXIV. The production of isolated photons in PbPb and pp collisions at root  $s(NN)=5.02$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.

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**CLXXV. Search for charged Higgs bosons decaying into a top and a bottom quark in the all-jet final state of pp collisions at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., Flechl M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.7, 2020 (SCI-Expanded)

**CLXXVI. Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in PbPb collisions at  $\sqrt{s_{NN}}=2.76$  and 5.02 TeV**

Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., Flechl M., et al.

European Physical Journal C, vol.80, no.6, 2020 (SCI-Expanded)

**CLXXVII. Measurements with silicon photomultipliers of dose-rate effects in the radiation damage of plastic scintillator tiles in the CMS hadron endcap calorimeter**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.

JOURNAL OF INSTRUMENTATION, vol.15, no.6, 2020 (SCI-Expanded)

**CLXXVIII. Determination of the strong coupling constant  $\alpha(S)(m(Z))$  from measurements of inclusive  $W^{+/-}$  and Z boson production cross sections in proton-proton collisions at root  $s=7$  and 8 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.6, 2020 (SCI-Expanded)

**CLXXIX. Strange hadron production in pp and pPb collisions at root  $(NN)-N-s=5.02$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.

PHYSICAL REVIEW C, vol.101, no.6, 2020 (SCI-Expanded)

**CLXXX. Measurement of the cross section for electroweak production of a Z boson, a photon and two jets in proton-proton collisions at root  $s=13$  TeV and constraints on anomalous quartic couplings**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., Flechl M., et al.

- JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.6, 2020 (SCI-Expanded)
- CLXXXI. **A measurement of the Higgs boson mass in the diphoton decay channel**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
PHYSICS LETTERS B, vol.805, 2020 (SCI-Expanded)
- CLXXXII. **Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
JOURNAL OF INSTRUMENTATION, vol.15, no.6, 2020 (SCI-Expanded)
- CLXXXIII. **Measurement of the top quark forward-backward production asymmetry and the anomalous chromoelectric and chromomagnetic moments in in pp collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.6, 2020 (SCI-Expanded)
- CLXXXIV. **Search for dijet resonances using events with three jets in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., Fruehwirth R., et al.  
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- CLXXXV. **Study of J/psi meson production inside jets in pp collisions at N root s=8 TeV The CM Collaboration**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.804, 2020 (SCI-Expanded)
- CLXXXVI. **Search for direct top squark pair production in events with one lepton, jets, and missing transverse momentum at 13 TeV with the CMS experiment**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.5, 2020 (SCI-Expanded)
- CLXXXVII. **Calibration of the CMS hadron calorimeters using proton-proton collision data at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
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- CLXXXVIII. **Search for high mass dijet resonances with a new background prediction method in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CLXXXIX. **Search for an excited lepton that decays via a contact interaction to a lepton and two jets in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
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- CXC. **Measurement of the Jet Mass Distribution and Top Quark Mass in Hadronic Decays of Boosted Top Quarks in pp Collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
PHYSICAL REVIEW LETTERS, vol.124, no.20, 2020 (SCI-Expanded)
- CXCI. **Measurement of differential cross sections and charge ratios for t-channel single top quark production in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., Flechl M., et al.

- European Physical Journal C, vol.80, no.5, 2020 (SCI-Expanded)
- CXCII. **Study of excited  $\Lambda(0)(b)$  states decaying to  $\Lambda(0)(b)\pi(+)\pi(-)$  in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., Fruehwirth R., et al.  
 PHYSICS LETTERS B, vol.803, 2020 (SCI-Expanded)
- CXCIII. **Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
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- CXCIV. **Running of the top quark mass from proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
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- CXCV. **Measurement of properties of  $B(s)(0)s \rightarrow \mu(+)\mu(-)$  decays and search for  $B-0 \rightarrow \mu(+)\mu(-)$  with the CMS experiment**  
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- CXCVI. **Constraints on the  $\chi(c1)$  versus  $\chi(c2)$  Polarizations in Proton-Proton Collisions at  $\sqrt{s}=8\text{TeV}$**   
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., Fruehwirth R., et al.  
 PHYSICAL REVIEW LETTERS, vol.124, no.16, 2020 (SCI-Expanded)
- CXCVII. **Measurement of the  $t(t)\overline{b}(b)\overline{b}$  production cross section in the all-jet final state in pp collisions at  $\sqrt{s}=13\text{TeV}$**   
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
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- CXCVIII. **Production of  $\Lambda(+)(c)$  baryons in proton-proton and lead-lead collisions at  $\sqrt{S\text{-NN}}=5.02\text{TeV}$**   
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- CXCIX. **Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at  $\sqrt{s}=13\text{TeV}$**   
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- CC. **Bose-Einstein correlations of charged hadrons in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
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- CCI. **Search for direct pair production of supersymmetric partners to the  $\tau$  lepton in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
 Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., Flechl M., et al.  
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- CCII. **Observation of the  $\Lambda(0)(b) \rightarrow J/\psi \Lambda \phi$  decay in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.

PHYSICS LETTERS B, vol.802, 2020 (SCI-Expanded)

CCIII. **A search for the standard model Higgs boson decaying to charm quarks**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., Fruehwirth R., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)

CCIV. **Search for physics beyond the standard model in multilepton final states in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., Fruehwirth R., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)

CCV. **Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at root s=13TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)

CCVI. **A multi-dimensional search for new heavy resonances decaying to boosted WW , WZ , or ZZ boson pairs in the dijet final state at 13 Te**

Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., Flechl M., et al.

European Physical Journal C, vol.80, no.3, 2020 (SCI-Expanded)

CCVII. **Search for new neutral Higgs bosons through the  $H \rightarrow ZA \rightarrow l^+ l^- b \bar{b}$  process in pp collisions at  $\sqrt{s} = 13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)

CCVIII. **Measurement of top quark pair production in association with a Z boson in proton-proton collisions at  $\sqrt{s} = 13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)

CCIX. **Search for a heavy pseudoscalar Higgs boson decaying into a 125 GeV Higgs boson and a Z boson in final states with two tau and two light leptons at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)

CCX. **Search for supersymmetry in pp collisions at root s=13 TeV with 137 fb(-1) in final states with a single lepton using the sum of masses of large-radius jets**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., Fruehwirth R., et al.

PHYSICAL REVIEW D, vol.101, no.5, 2020 (SCI-Expanded)

CCXI. **Search for lepton flavour violating decays of a neutral heavy Higgs boson to mu tau and e tau in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)

CCXII. **Search for a heavy Higgs boson decaying to a pair of W bosons in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A.

- E., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)
- CCXIII. **Measurement of the top quark pair production cross section in dilepton final states containing one tau lepton in pp collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.2, 2020 (SCI-Expanded)
- CCXIV. **Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., Flechl M., et al.  
European Physical Journal C, vol.80, no.2, 2020 (SCI-Expanded)
- CCXV. **Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., Fruehwirth R., et al.  
JOURNAL OF INSTRUMENTATION, vol.15, no.2, 2020 (SCI-Expanded)
- CCXVI. **Search for top squark pair production in a final state with two tau leptons in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.2, 2020 (SCI-Expanded)
- CCXVII. **Observation of nuclear modifications in W-+/- boson production in pPb collisions at root s(NN)=8.16 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.800, 2020 (SCI-Expanded)
- CCXVIII. **Evidence for WW production from double-parton interactions in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.80, no.1, 2020 (SCI-Expanded)
- CCXIX. **Searches for physics beyond the standard model with the MT 2 variable in hadronic final states with and without disappearing tracks in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., Flechl M., et al.  
European Physical Journal C, vol.80, no.1, 2020 (SCI-Expanded)
- CCXX. **Search for light pseudoscalar boson pairs produced from decays of the 125 GeV Higgs boson in final states with two muons and two nearby tracks in pp collisions at root s d=13TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.800, 2020 (SCI-Expanded)
- CCXXI. **Search for Supersymmetry with a Compressed Mass Spectrum in Events with a Soft tau Lepton, a Highly Energetic Jet, and Large Missing Transverse Momentum in Proton-Proton Collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
PHYSICAL REVIEW LETTERS, vol.124, no.4, 2020 (SCI-Expanded)
- CCXXII. **Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.

- EUROPEAN PHYSICAL JOURNAL C, vol.80, no.1, 2020 (SCI-Expanded)
- CCXXIII. **Multiparticle correlation studies in pPb collisions at  $\sqrt{s_{NN}}=8.16$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICAL REVIEW C, vol.101, no.1, 2020 (SCI-Expanded)
- CCXXIV. **Search for electroweak production of a vector-like T quark using fully hadronic final states**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Escalante Del Valle A., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.1, 2020 (SCI-Expanded)
- CCXXV. **Measurement of the single top quark and antiquark production cross sections in the t channel and their ratio in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.800, 2020 (SCI-Expanded)
- CCXXVI. **Measurement of electroweak production of a W boson in association with two jets in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CCXXVII. **Recycling of an Agricultural Bio-waste as a Novel Cellulose Aerogel: A Green Chemistry Study**  
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- CCXXVIII. **Search for a charged Higgs boson decaying into top and bottom quarks in events with electrons or muons in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CCXXIX. **Search for Low-Mass Quark-Antiquark Resonances Produced in Association with a Photon at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICAL REVIEW LETTERS, vol.123, no.23, 2019 (SCI-Expanded)
- CCXXX. **Measurement of the differential Drell-Yan cross section in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCXXXI. **Probing the chiral magnetic wave in pPb and PbPb collisions at  $\sqrt{s_{NN}}=5.02$  TeV using charge-dependent azimuthal anisotropies**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW C, vol.100, no.6, 2019 (SCI-Expanded)
- CCXXXII. **Measurements of differential Z boson production cross sections in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCXXXIII. **Search for anomalous triple gauge couplings in WW and WZ production in lepton plus jet events in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.



- JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.12, 2019 (SCI-Expanded)
- CCXXXIV. **Study of the  $B^+ \rightarrow J/\psi(\Lambda)\overline{b}p$  decay in proton-proton collisions at root  $s=8$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
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- CCXXXV. **Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at root  $s=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
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- CCXXXVI. **Constraints on anomalous HVV couplings from the production of Higgs bosons decaying to tau lepton pairs**  
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- CCXXXVII. **Search for long-lived particles using delayed photons in proton-proton collisions at root  $s=13$  TeV**  
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- CCXXXVIII. **Search for Physics beyond the Standard Model in Events with Overlapping Photons and Jets**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
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- CCXXXIX. **Pseudorapidity distributions of charged hadrons in xenon-xenon collisions at root  $S_{NN}=5.44$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.799, 2019 (SCI-Expanded)
- CCXL. **Search for supersymmetry using Higgs boson to diphoton decays at root  $s=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCXLI. **Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
PHYSICS LETTERS B, vol.798, 2019 (SCI-Expanded)
- CCXLII. **Measurement of the average very forward energy as a function of the track multiplicity at central pseudorapidities in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., Flechl M., et al.  
European Physical Journal C, vol.79, no.11, 2019 (SCI-Expanded)
- CCXLIII. **Search for anomalous electroweak production of vector boson pairs in association with two jets in proton-proton collisions at 13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.798, 2019 (SCI-Expanded)
- CCXLIV. **Search for MSSM Higgs bosons decaying to  $\mu^{(+)}\mu^{(-)}$  in proton-proton collisions at root  $s=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
PHYSICS LETTERS B, vol.798, 2019 (SCI-Expanded)
- CCXLV. **Measurements of triple-differential cross sections for inclusive isolated-photon+jet events in p p collisions at  $\sqrt{s}=8$  TeV**

Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., et al.

European Physical Journal C, vol.79, no.11, 2019 (SCI-Expanded)

CCXLVI. **Search for new physics in top quark production in dilepton final states in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**

Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., et al.

European Physical Journal C, vol.79, no.11, 2019 (SCI-Expanded)

CCXLVII. **Measurement of the top quark Yukawa coupling from  $t(\bar{t})$  over-bar kinematic distributions in the lepton plus jets final state in proton-proton collisions at root  $s=13\text{ TeV}$**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.

PHYSICAL REVIEW D, vol.100, no.7, 2019 (SCI-Expanded)

CCXLVIII. **Search for supersymmetry in proton-proton collisions at 13 TeV in final states with jets and missing transverse momentum**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.10, 2019 (SCI-Expanded)

CCXLIX. **Search for Higgs and Z boson decays to  $J/\psi$  or Y pairs in the four-muon final state in proton-proton collisions at root  $s=13\text{ TeV}$**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.

PHYSICS LETTERS B, vol.797, 2019 (SCI-Expanded)

CCL. **Search for pair production of vectorlike quarks in the fully hadronic final state**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.

PHYSICAL REVIEW D, vol.100, no.7, 2019 (SCI-Expanded)

CCLI. **Evidence for light-by-light scattering and searches for axion-like particles in ultraperipheral PbPb collisions at root  $s(NN)=5.02\text{ TeV}$**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.

PHYSICS LETTERS B, vol.797, 2019 (SCI-Expanded)

CCLII. **Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at root  $s=13\text{ TeV}$**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.

PHYSICS LETTERS B, vol.797, 2019 (SCI-Expanded)

CCLIII. **Measurement of the top quark polarization and  $t(\bar{t})$  over-barspin correlations using dilepton final states in proton-proton collisions at root  $s=13\text{ TeV}$**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.

PHYSICAL REVIEW D, vol.100, no.7, 2019 (SCI-Expanded)

CCLIV. **Search for resonances decaying to a pair of Higgs bosons in the  $b(\bar{b})$  over-bar  $q(\bar{q})$  over-bar ' l nu final state in proton-proton collisions at root  $s=13\text{ TeV}$**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Escalante Del Valle A., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.10, 2019 (SCI-Expanded)

CCLV. **Search for dark photons in decays of Higgs bosons produced in association with Z bosons in proton-proton collisions at root  $s=13\text{ TeV}$**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Escalante Del Valle A., Flechl M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.10, 2019 (SCI-Expanded)

- CCLVI. **Charged-particle angular correlations in XeXe collisions at  $\sqrt{s(NN)}=5.44$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICAL REVIEW C, vol.100, no.4, 2019 (SCI-Expanded)
- CCLVII. **Search for a Light Charged Higgs Boson Decaying to a W Boson and a CP-Odd Higgs Boson in Final States with  $e\mu\mu$  or  $\mu\mu\mu$  in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
PHYSICAL REVIEW LETTERS, vol.123, no.13, 2019 (SCI-Expanded)
- CCLVIII. **Measurement of B-s(0) meson production in pp and PbPb collisions at  $\sqrt{s-NN}=5.02$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.796, pp.168-190, 2019 (SCI-Expanded)
- CCLIX. **A search for pair production of new light bosons decaying into muons in proton-proton collisions at 13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.796, pp.131-154, 2019 (SCI-Expanded)
- CCLX. **Azimuthal separation in nearly back-to-back jet topologies in inclusive 2- and 3-jet events in pp collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
European Physical Journal C, vol.79, no.9, 2019 (SCI-Expanded)
- CCLXI. **Measurement of electroweak WZ boson production and search for new physics in WZ two jets events in pp collisions at  $\sqrt{s}=13$  TeV**  
ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A.  
Physics Letters B, vol.795, pp.281-307, 2019 (SCI-Expanded)
- CCLXII. **Centrality and pseudorapidity dependence of the transverse energy density in pPb collisions at  $\sqrt{s(NN)}=5.02$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW C, vol.100, no.2, 2019 (SCI-Expanded)
- CCLXIII. **Search for supersymmetry with a compressed mass spectrum in the vector boson fusion topology with 1-lepton and 0-lepton final states in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.8, 2019 (SCI-Expanded)
- CCLXIV. **Measurement of exclusive  $\rho(770)0$  photoproduction in ultraperipheral pPb collisions at  $\sqrt{sNN}=5.02$  TeV**  
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., et al.  
European Physical Journal C, vol.79, no.8, 2019 (SCI-Expanded)
- CCLXV. **Search for dark matter in events with a leptoquark and missing transverse momentum in proton-proton collisions at 13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.795, pp.76-99, 2019 (SCI-Expanded)
- CCLXVI. **Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state with**

**two muons and two b quarks in pp collisions at 13 TeV**

KAYA M., GÜLMEZ E., KAYIŞ TOPAKSU A., KAYA Ö., ÇERÇİ S., ÖZKORUCUKLU S., TEK TEN S.  
Physics Letters B, vol.795, pp.398-423, 2019 (SCI-Expanded)

- CCLXVII. **Search for the production of (WWW -/+)-W-+/-W-+/- events at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
PHYSICAL REVIEW D, vol.100, no.1, 2019 (SCI-Expanded)
- CCLXVIII. **Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at  $\sqrt{s}=13$  TeV**  
ÇERÇİ S., GÜLMEZ E., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A.  
European Physical Journal C, vol.79, 2019 (SCI-Expanded)
- CCLXIX. **Performance of missing transverse momentum reconstruction in proton-proton collisions at  $\sqrt{s}=13$  TeV using the CMS detector**  
ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A.  
Journal Of Instrumentation, vol.14, pp.7004, 2019 (SCI-Expanded)
- CCLXX. **Studies of Beauty Suppression via Nonprompt D-0 Mesons in Pb-Pb Collisions at root s(NN)=5.02 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.123, no.2, 2019 (SCI-Expanded)
- CCLXXI. **Search for charged Higgs bosons in the  $H_{\pm} \rightarrow \tau_{\pm}\nu_{\tau}$  decay channel in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A., KAYA M.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, 2019 (SCI-Expanded)
- CCLXXII. **Search for the associated production of the Higgs boson and a vector boson in proton-proton collisions at  $\sqrt{s}=13$  TeV via Higgs boson decays to leptons**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.6, 2019 (SCI-Expanded)
- CCLXXIII. **Search for supersymmetry in final states with photons and missing transverse momentum in proton-proton collisions at 13 TeV**  
ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., TEK TEN S., YETKİN E. A.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, 2019 (SCI-Expanded)
- CCLXXIV. **Search for invisible decays of a Higgs boson produced through vector boson fusion in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.793, pp.520-551, 2019 (SCI-Expanded)
- CCLXXV. **An embedding technique to determine  $\tau\tau$  backgrounds in proton-proton collision data**  
ÇERÇİ S., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., TEK TEN S., GÜLMEZ E., YETKİN E. A.  
Journal Of Instrumentation, vol.14, pp.6032, 2019 (SCI-Expanded)
- CCLXXVI. **Search for a standard model-like Higgs boson in the mass range between 70 and 110 GeV in the diphoton final state in proton-proton collisions at root s=8 and 13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.793, pp.320-347, 2019 (SCI-Expanded)
- CCLXXVII. **Measurements of the Higgs boson width and anomalous  $h\gamma\gamma$  couplings from on-shell and off-shell production in the four-lepton final state**  
ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., YETKİN E. A.  
PHYSICAL REVIEW D, vol.99, 2019 (SCI-Expanded)

- :CLXXVIII. **Measurement of the  $\overline{t}t$  production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at  $\sqrt{s}=13$  TeV**  
 ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., TEK TEN S., YETKİN E. A.  
 European Physical Journal C, vol.79, 2019 (SCI-Expanded)
- CCLXXIX. **Search for associated production of a Higgs boson and a single top quark in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 PHYSICAL REVIEW D, vol.99, no.9, 2019 (SCI-Expanded)
- CCLXXX. **Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 KAYIŞ TOPAKSU A., GÜLMEZ E., KAYA Ö., ÇERÇİ S., YETKİN E. A., ÖZKORUCUKLU S., TEK TEN S., KAYA M.  
 European Physical Journal C, vol.79, 2019 (SCI-Expanded)
- CCLXXXI. **Search for an L-mu - L-tau gauge boson using  $Z \rightarrow 4\mu$  events in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.  
 PHYSICS LETTERS B, vol.792, pp.345-368, 2019 (SCI-Expanded)
- CCLXXXII. **Measurement and interpretation of differential cross sections for Higgs boson production at  $\sqrt{s}=13$  TeV**  
 KAYA M., GÜLMEZ E., ÇERÇİ S., KAYA Ö., KAYIŞ TOPAKSU A., YETKİN E. A., ÖZKORUCUKLU S.  
 Physics Letters B, vol.792, pp.369-396, 2019 (SCI-Expanded)
- :CLXXXIII. **Search for a low-mass  $\tau(-)\tau(+)$  resonance in association with a bottom quark in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Escalante Del Valle A., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.5, 2019 (SCI-Expanded)
- :CLXXXIV. **Combined measurements of Higgs boson couplings in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., et al.  
 European Physical Journal C, vol.79, no.5, 2019 (SCI-Expanded)
- CCLXXXV. **Combinations of single-top-quark production cross-section measurements and  $flVVtb$  determinations at  $\sqrt{s}=7$  and 8 TeV with the ATLAS and CMS experiments**  
 ÇERÇİ S., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, 2019 (SCI-Expanded)
- :CLXXXVI. **Measurement of inclusive very forward jet cross sections in proton-lead collisions at  $p_{NN}=5.02$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.5, 2019 (SCI-Expanded)
- CLXXXVII. **Search for supersymmetry in events with a photon, jets,  $b$ -jets, and missing transverse momentum in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A.  
 European Physical Journal C, vol.79, 2019 (SCI-Expanded)
- :LXXXVIII. **Search for a  $W'$  boson decaying to a tau lepton and a neutrino in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 PHYSICS LETTERS B, vol.792, pp.107-131, 2019 (SCI-Expanded)

- 3CLXXXIX. **Search for resonant production of second-generation sleptons with same-sign dimuon events in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
 Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., et al.  
 European Physical Journal C, vol.79, no.4, 2019 (SCI-Expanded)
- CCXC. **Measurements of the  $pp \rightarrow WZ$  inclusive and differential production cross sections and constraints on charged anomalous triple gauge couplings at  $s = 13 \text{ TeV}$**   
 ÇERÇİ S., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, 2019 (SCI-Expanded)
- CCXCI. **Search for nonresonant Higgs boson pair production in the  $b(\bar{b})\bar{b}(b)$  final state at  $\sqrt{s}=13 \text{ TeV}$**   
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.4, 2019 (SCI-Expanded)
- CCXCII. **Search for contact interactions and large extra dimensions in the dilepton mass spectra from proton-proton collisions at  $s = 13 \text{ TeV}$**   
 ÇERÇİ S., GÜLMEZ E., KAYA M., KAYA Ö., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, 2019 (SCI-Expanded)
- CCXCIII. **Measurement of the top quark mass in the all-jets final state at  $\sqrt{s}=13 \text{ TeV}$  and combination with the leptonjets channel**  
 ÇERÇİ S., GÜLMEZ E., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A.  
 European Physical Journal C, vol.79, 2019 (SCI-Expanded)
- CCXCIV. **Search for  $W \rightarrow \mu\mu$  Boson Decays to Three Charged Pions**  
 ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A.  
 Physical Review Letters, vol.122, 2019 (SCI-Expanded)
- CCXCV. **Jet Shapes of Isolated Photon-Tagged Jets in Pb-Pb and pp Collisions at  $\sqrt{s}=5.02 \text{ TeV}$**   
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.  
 PHYSICAL REVIEW LETTERS, vol.122, no.15, 2019 (SCI-Expanded)
- CCXCVI. **Search for vector-like quarks in events with two oppositely charged leptons and jets in proton-proton collisions at  $\sqrt{s} = 13 \text{ TeV}$**   
 ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A.  
 European Physical Journal C, vol.79, 2019 (SCI-Expanded)
- CCXCVII. **Observation of Single Top Quark Production in Association with a  $Z$  Boson in Proton-Proton Collisions at  $\sqrt{s}=13 \text{ TeV}$**   
 KAYA M., ZEYREK M. T., KAYIŞ TOPAKSU A., GÜLMEZ E., KAYA Ö., ÇERÇİ S., YETKİN E. A., ÖZKORUCUKLU S.  
 Physical Review Letters, vol.122, 2019 (SCI-Expanded)
- CCXCVIII. **Search for excited leptons in final states in proton-proton collisions at  $\sqrt{s}=13 \text{ TeV}$**   
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.4, 2019 (SCI-Expanded)
- CCXCIX. **Search for resonant  $t(\bar{t})$  production in proton-proton collisions at  $\sqrt{s}=13 \text{ TeV}$**   
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.4, 2019 (SCI-Expanded)
- CCC. **Measurements of properties of the Higgs boson decaying to a  $W$  boson pair in pp collisions at  $\sqrt{s}=13 \text{ TeV}$**   
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
 PHYSICS LETTERS B, vol.791, pp.96-129, 2019 (SCI-Expanded)

- CCCI. **Observation of prompt  $J/\psi$  meson elliptic flow in high-multiplicity pPb collisions at root  $s(NN)=8.16$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
 PHYSICS LETTERS B, vol.791, pp.172-194, 2019 (SCI-Expanded)
- CCCII. **Search for dark matter produced in association with a single top quark or a top quark pair in proton-proton collisions at  $s = 13 \sqrt{s}=13$  TeV**  
 ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., TEK TEN S., YETKİN E. A.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, 2019 (SCI-Expanded)
- CCCIII. **Search for a heavy resonance decaying to a top quark and a vector-like top quark in the lepton jets final state in pp collisions at  $\sqrt{s} = 13 \text{ TeV}$**   
 KAYA M., ÇERÇİ S., KAYA Ö., KAYIŞ TOPAKSU A., ZEYREK M. T., TEK TEN S., ÖZKORUCUKLU S., YETKİN E. A.  
 European Physical Journal C, vol.79, 2019 (SCI-Expanded)
- CCCIV. **Measurement of exclusive  $\Upsilon$  photoproduction from protons in p Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV**  
 Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
 European Physical Journal C, vol.79, no.3, 2019 (SCI-Expanded)
- CCCIV. **Search for supersymmetric partners of electrons and muons in proton-proton collisions at root  $s=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 PHYSICS LETTERS B, vol.790, pp.140-166, 2019 (SCI-Expanded)
- CCCVI. **Search for a W boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.3, 2019 (SCI-Expanded)
- CCCVII. **Search for  $t(\bar{t})$  production in the  $H \rightarrow b(\bar{b})$  decay channel with leptonic  $t(\bar{t})$  decays in proton-proton collisions at root  $s=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.3, 2019 (SCI-Expanded)
- CCCVIII. **Inclusive search for supersymmetry in pp collisions at  $s = 13 \sqrt{s}=13$  TeV using razor variables and boosted object identification in zero and one lepton final states**  
 KAYA M., KAYIŞ TOPAKSU A., GÜLMEZ E., ZEYREK M. T., KAYA Ö., ÇERÇİ S., YETKİN E. A., ÖZKORUCUKLU S., TEK TEN S.  
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, 2019 (SCI-Expanded)
- CCCIX. **Combination of Searches for Higgs Boson Pair Production in Proton-Proton Collisions at root  $s=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCCX. **Search for pair production of first-generation scalar leptoquarks at root  $s=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCCXI. **Search for top quark partners with charge  $5/3$  in the same-sign dilepton and single-lepton final states in proton-proton collisions at root  $s=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.  
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- CCCXII. **Measurement of prompt  $\psi(2S)$  production cross sections in proton-lead and proton-proton collisions at  $\sqrt{s(NN)}=5.02$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.  
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- CCCXIII. **Measurement of associated production of a W boson and a charm quark in proton–proton collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.  
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- CCCXIV. **Measurement of nuclear modification factors of  $\gamma(1S)$ ,  $\gamma(2S)$ , and  $\gamma(3S)$  mesons in PbPb collisions at  $\sqrt{s(NN)}=5.02$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.  
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- CCCXV. **Search for Narrow H  $\gamma$  Resonances in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., et al.  
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- CCCXVI. **Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton–proton collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., et al.  
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- CCCXVII. **Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two leptons and two jets in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CCCXVIII. **Search for the pair production of light top squarks in the  $e\pm\mu\bar{\nu}$  final state in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 ÇERÇİ S., KAYA Ö., KAYIŞ TOPAKSU A., TEKTEEN S., YETKİN E. A., ÖZKORUCUKLU S., KAYA M.  
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- CCCXIX. **Search for single production of vector-like quarks decaying to a top quark and a W boson in proton–proton collisions at  $\sqrt{s}=13$  TeV**  
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- CCCXX. **D-0-Meson R-AA in PbPb Collisions at  $\sqrt{s(NN)}=5.02$  TeV and Elliptic Flow in pPb Collisions at  $\sqrt{s(NN)}=8.16$  TeV with CMS**  
 Shi Z., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., et al.  
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- CCCXXI. **Search for pair production of second-generation leptoquarks at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., et al.  
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- CCCXXII. **Beyond nPDFs effects : Prompt J/ $\psi$  and  $\psi(2S)$  production in pPb and pp collisions**  
 Oh G., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., et al.  
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- CCCXXIII. **Search for long-lived particles decaying into displaced jets in proton-proton collisions at root s=13 TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCCXXIV. **Fragmentation of J/psi in jets in pp collisions at root s=5.02 TeV Batoul Diab for the CMS collaboration**  
 Diab B., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., et al.  
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- CCCXXV. **CMS Collaboration**  
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- CCCXXVI. **Non-Gaussian elliptic-flow fluctuations in PbPb collisions at root S-NN=5.02 TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CCCXXVII. **Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCCXXVIII. **Multiparticle correlations and higher order harmonics in pPb collisions at root s(NN)=8.16 TeV**  
 Wang Q., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., et al.  
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- CCCXXIX. **Search for new particles decaying to a jet and an emerging jet**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Escalante Del Valle A., et al.  
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- CCCXXX. **Evidence for light-by-light scattering in ultraperipheral PbPb collisions at root S-NN=5.02 TeV**  
 d'Enterria D., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., et al.  
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- CCCXXXI. **Search for rare decays of Z and Higgs bosons to J /  $\psi$  and a photon in proton-proton collisions at  $\sqrt{s} = 13$  TeV**  
 Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., et al.  
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- CCCXXXII. **Study of the underlying event in top quark pair production in p p collisions at 13 Te**  
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- CCCXXXIII. **Measurement of anisotropic flow in XeXe collisions at 5.44 TeV with the CMS experiment**  
 Stojanovic M., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., et al.  
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- CCCXXXIV. **Measurement of differential cross sections for Z boson pair production in association with jets at root s=8 and 13 TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del

Valle A. E., et al.

PHYSICS LETTERS B, vol.789, pp.19-44, 2019 (SCI-Expanded)

CCCXXXV. **Measurements of  $t\bar{t}$  differential cross sections in proton-proton collisions at root  $s=13$  TeV using events containing two leptons**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.

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CCCXXXVI. **Search for heavy Majorana neutrinos in same-sign dilepton channels in proton-proton collisions at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Escalante Del Valle A., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.1, 2019 (SCI-Expanded)

CCCXXXVII. **Search for Higgs boson pair production in the  $\gamma\gamma b\bar{b}$  final state in pp collisions at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

PHYSICS LETTERS B, vol.788, pp.7-36, 2019 (SCI-Expanded)

CCCXXXVIII. **Search for pair-produced three-jet resonances in proton-proton collisions at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.

PHYSICAL REVIEW D, vol.99, no.1, 2019 (SCI-Expanded)

CCCXXXIX. **Search for low-mass resonances decaying into bottom quark-antiquark pairs in proton-proton collisions at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.

PHYSICAL REVIEW D, vol.99, no.1, 2019 (SCI-Expanded)

CCCXL. **Search for heavy resonances decaying into two Higgs bosons or into a Higgs boson and a W or Z boson in proton-proton collisions at 13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

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CCCXLI. **Search for Dark Matter Particles Produced in Association with a Top Quark Pair at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.

PHYSICAL REVIEW LETTERS, vol.122, no.1, 2019 (SCI-Expanded)

CCCXLII. **Measurement of differential cross sections for inclusive isolated-photon and photon+jet production in proton-proton collisions at  $\sqrt{s}=13$  TeV**

Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.

European Physical Journal C, vol.79, no.1, 2019 (SCI-Expanded)

CCCXLIII. **Search for the Higgs Boson Decaying to Two Muons in Proton-Proton Collisions at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

PHYSICAL REVIEW LETTERS, vol.122, no.2, 2019 (SCI-Expanded)

CCCXLIV. **Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in proton-proton collisions at root  $s=13$  TeV**

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CCCXLV. **Search for production of Higgs boson pairs in the four b quark final state using large-area jets in proton-proton collisions at root  $s=13$  TeV**

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- CCCXLVI. **Measurement of inclusive and differential Higgs boson production cross sections in the diphoton decay channel in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Escalante Del Valle A., et al.  
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- CCCXLVII. **Angular analysis of the decay  $B^+ \rightarrow K^+ \mu^+ \mu^-$  in proton-proton collisions at  $\sqrt{s}=8$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- CCXLVIII. **Search for Leptoquarks Coupled to Third-Generation Quarks in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.  
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- CCCXLIX. **Event shape variables measured using multijet final states in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A., Tumasyan A., Adam W., GÜLMEZ E., KAYA M., KAYA Ö., ÖZKORUCUKLU S., YETKİN E. A.  
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- CCCL. **Search for pair-produced resonances decaying to quark pairs in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCCLI. **Observation of Medium-Induced Modifications of Jet Fragmentation in Pb-Pb Collisions at  $\sqrt{s_{NN}}=5.02$  TeV Using Isolated Photon-Tagged Jets**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CCCLII. **Measurements of the differential jet cross section as a function of the jet mass in dijet events from proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A., Tumasyan A., Adam W., GÜLMEZ E., KAYA M., KAYA Ö., ÖZKORUCUKLU S., TEK TEN AKSÜR MELİ Z. S., YETKİN E. A.  
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- CCCLIII. **Evidence for the Associated Production of a Single Top Quark and a Photon in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV**  
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- CCCLIV. **Search for the decay of a Higgs boson in the  $ll \gamma$  channel in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CCCLV. **Searches for pair production of charginos and top squarks in final states with two oppositely charged leptons in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A., Tumasyan A., Adam W., GÜLMEZ E., KAYA M., ÖZKORUCUKLU S., TEK TEN AKSÜR MELİ Z. S., YETKİN E. A.  
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- CCCLVI. **Search for supersymmetry in events with a tau lepton pair and missing transverse momentum in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
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- CCCLVII. **Measurement of jet substructure observables in  $\text{pp}$  events from proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
 Sirunyan A., Tumasyan A., Adam W., GÜLMEZ E., KAYA M., KAYA Ö., ÖZKORUCUKLU S., TEK TEN AKSÜRME Lİ Z. S., YETKİN E. A.  
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- CCCLVIII. **Search for long-lived particles with displaced vertices in multijet events in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
 Sirunyan A., Tumasyan A., Adam W., GÜLMEZ E., KAYA M., KAYA Ö., ÖZKORUCUKLU S., TEK TEN AKSÜRME Lİ Z. S., YETKİN E. A.  
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- CCCLIX. **Measurement of differential cross sections for Z boson production in association with jets in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
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- CCCLX. **Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
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- CCCLXI. **Measurement of the top quark mass with lepton+jets final states using  $\text{pp}$  collisions at  $\sqrt{s}=13\text{TeV}$**   
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- CCCLXII. **Search for physics beyond the standard model in high-mass diphoton events from proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
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- CCCLXIII. **Search for a charged Higgs boson decaying to charm and bottom quarks in proton-proton collisions at  $\sqrt{s}=8\text{TeV}$**   
 Sirunyan A., Tumasyan A., Adam W., GÜLMEZ E., KAYA M., KAYA Ö., ÖZKORUCUKLU S., TEK TEN AKSÜRME Lİ Z. S., YETKİN E. A.  
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- CCCLXIV. **Search for resonances in the mass spectrum of muon pairs produced in association with b quark jets in proton-proton collisions at  $\sqrt{s}=8$  and  $13\text{TeV}$**   
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- CCCLXV. **Search for black holes and sphalerons in high-multiplicity final states in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Escalante Del Valle A., et al.  
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- CCCLXVI. **Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state of two muons and two tau leptons in proton-proton collisions at TeV**  
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- CCCLXVII. **Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos and b quarks at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
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- :CCLXVIII. **Studies of B<sub>s2</sub>(5840)<sup>0</sup> and B<sub>s1</sub>(5830)<sup>0</sup> mesons including the observation of sqrt{s}=8TeV**  
Sirunyan A., Tumasyan A., GÜLMEZ E., KAYA M., KAPLAN A., ÖZKORUCUKLU S., TEKLEN AKSÜRMELE Z. S., YETKİN E. A.  
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- CCCLXIX. **Pseudorapidity and transverse momentum dependence of flow harmonics in pPb and PbPb collisions**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
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- CCCLXX. **Search for Pair-Produced Resonances Each Decaying into at Least Four Quarks in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV**  
CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEKLEN S., YETKİN E. A., YETKİN T., et al.  
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- CCCLXXI. **Precision measurement of the structure of the CMS inner tracking system using nuclear interactions**  
CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEKLEN S., YETKİN E. A., YETKİN T., et al.  
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- CCCLXXII. **Measurement of the groomed jet mass in PbPb and pp collisions at root s(NN)=5.02 TeV**  
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- :CCLXXIII. **Observation of the  $Z \rightarrow \mu\mu$  Decay in  $\sqrt{s}=13$  TeV Collisions at  $\sqrt{s}=13$  TeV**  
CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEKLEN S., YETKİN E. A., YETKİN T., et al.  
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- :CCLXXIV. **Measurement of the production cross section for single top quarks in association with W bosons in proton-proton collisions at root s=13 TeV**  
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- CCCLXXV. **Performance of reconstruction and identification of  $\tau$  leptons decaying to hadrons and  $\nu\tau$  in pp collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A., Tumasyan A., Adam W., GÜLMEZ E., KAYA M., KAYA Ö., ÖZKORUCUKLU S., TEKLEN AKSÜRMELE Z. S., YETKİN E. A.  
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- :CCLXXVI. **Charged-particle nuclear modification factors in XeXe collisions at root S-NN=5.44 TeV**

- Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicovic M., Ero J., Del Valle A. E., et al.  
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- CCLXXVII. **Study of jet quenching with isolated-photon plus jet correlations in PbPb and pp collisions at root s(NN)=5.02 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicovic M., Ero J., et al.  
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- :CLXXVIII. **Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state with two bquarks and two tau leptons in proton-proton collisions at root s=13 TeV The CMS Collaboration**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicovic M., Ero J., et al.  
PHYSICS LETTERS B, vol.785, pp.462-488, 2018 (SCI-Expanded)
- :CCLXXIX. **Search for Z gamma resonances using leptonic and hadronic final states in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicovic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.9, 2018 (SCI-Expanded)
- CCCLXXX. **Search for new physics in dijet angular distributions using proton-proton collisions at  $\sqrt{s}=13\text{TeV}$  and constraints on dark matter and other models**  
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicovic M., Erö J., et al.  
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- :CCLXXXI. **Measurement of the weak mixing angle using the forward-backward asymmetry of Drell-Yan events in  $\text{pp}$  collisions at  $8\sqrt{s}\text{TeV}$**   
CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., YETKİN E. A., YETKİN T., ZEYREK M. T.  
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- CCLXXXII. **Search for third-generation scalar leptoquarks decaying to a top quark and a  $\tau$  lepton at  $\sqrt{s}=13\text{TeV}$**   
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- :CLXXXIII. **Measurement of charged particle spectra in minimum-bias events from proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
CMS C., SUNAR ÇERÇİ D., ÇERÇİ S., DUMANOĞLU İ., EŞKUT E., KAYIŞ TOPAKSU A., KANGAL E. E., ÖZDEMİR K., ÖZTÜRK S., POLATÖZ A., et al.  
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- :CLXXXIV. **Search for additional neutral MSSM Higgs bosons in the tau tau final state in proton-proton collisions at root s=13 TeV**  
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- CCLXXXV. **Search for a heavy resonance decaying into a Z boson and a Z or W boson in 2l2q final states at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicovic M., Ero J., et al.  
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- :CLXXXVI. **Search for top squarks decaying via four-body or chargino-mediated modes in single-lepton final states in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicovic

M., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.9, 2018 (SCI-Expanded)

CLXXXVII. **Observation of Higgs Boson Decay to Bottom Quarks**

Sirunyan A., Tumasyan A., Adam W., GÜLMEZ E., KAYA M., KAYA Ö., ÖZKORUCUKLU S., TEK TEN AKSÜR MELİ Z. S., YETKİN E. A.

Physical Review Letters, vol.121, pp.1-20, 2018 (SCI-Expanded)

.LXXXVIII. **Measurement of the  $Z/\gamma^* \rightarrow \tau\tau$  cross section in pp collisions at  $\sqrt{s}=13\text{TeV}$  and validation of  $\tau$  lepton analysis techniques**

Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.

European Physical Journal C, vol.78, no.9, 2018 (SCI-Expanded)

.CLXXXIX. **Search for dark matter produced in association with a Higgs boson decaying to  $\gamma\gamma$  or  $\tau\tau$  – at  $s=13\sqrt{s}=13\text{TeV}$**

CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A., YETKİN T., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, 2018 (SCI-Expanded)

CCCXC. **Search for resonant pair production of Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at 13 TeV**

CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A., YETKİN T., ZEYREK M. T.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, 2018 (SCI-Expanded)

CCCXCI. **title Observation of the  $\mathbb{mrow msub mrow mi\chi/mi /mrow mrow mib/mi mn1/mn /mrow /msub mo stretchy="false"(/mo mn3/mn miP/mi mo stretchy="false")/mo /mrow /math$  and  $\mathbb{mrow msub mrow mi\chi/mi /mrow mrow mib/mi mn2/mn /mrow /msub mo stretchy="false"(/mo mn3/mn miP/mi mo stretchy="false")/mo /mrow /math$  and Measurement of their Masses/title**

CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A., YETKİN T., et al.

Physical Review Letters, vol.121, 2018 (SCI-Expanded)

CCCXCII. **Measurement of the cross section for top quark pair production in association with a W or Z boson in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.8, 2018 (SCI-Expanded)

CCCXCIII. **Search for beyond the standard model Higgs bosons decaying into a  $b\bar{b}$**

**$\mathbb{mrm{b}}\overline{\mathbb{mrm{b}}}$  pair in pp collisions at  $s=13\sqrt{s}=13\text{TeV}$**

CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A., YETKİN T., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, 2018 (SCI-Expanded)

CCCXCIV. **title Constraints on models of scalar and vector leptoquarks decaying to a quark and a neutrino at  $\mathbb{mrow msqrt mrow mis/mi /mrow /msqrt mo=/mo mn13/mn mtext /mtext mtext /mtext miTeV/mi /mrow /math$ /title**

CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN T., ZEYREK M. T.

PHYSICAL REVIEW D, vol.98, 2018 (SCI-Expanded)

CCCXCV. **Search for vector-like T and B quark pairs in final states with leptons at  $\sqrt{s}=13\text{TeV}$**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.8, 2018 (SCI-Expanded)

CCCXCVI. **Search for narrow and broad dijet resonances in proton-proton collisions at  $s=13\sqrt{s}=13\text{TeV}$  and constraints on dark matter mediators and other new particles**

CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A., YETKİN T., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, 2018 (SCI-Expanded)

CCCXCVII. **Constraining Gluon Distributions in Nuclei Using Dijets in Proton-Proton and Proton-Lead Collisions at  $\sqrt{s(NN)}=5.02$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.

PHYSICAL REVIEW LETTERS, vol.121, no.6, 2018 (SCI-Expanded)

:CCXCVIII. **Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying tau leptons at  $\sqrt{s}=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.8, 2018 (SCI-Expanded)

CCCXCIX. **Elliptic Flow of Charm and Strange Hadrons in High-Multiplicity p plus Pb Collisions at  $\sqrt{s(NN)}=8.16$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

PHYSICAL REVIEW LETTERS, vol.121, no.8, 2018 (SCI-Expanded)

CD. **Search for a singly produced third-generation scalar leptoquark decaying to a  $\tau$  lepton and a bottom quark in proton-proton collisions at  $\sqrt{s}=13$  TeV**

CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZKORUCUKLU S., TEK TEN S., YETKİN E. A., YETKİN T., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, 2018 (SCI-Expanded)

CDI. **Measurement of the inelastic proton-proton cross section at  $\sqrt{s}=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.7, 2018 (SCI-Expanded)

CDII. **Search for new physics in events with two soft oppositely charged leptons and missing transverse momentum in proton-proton collisions at  $\sqrt{s}=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

PHYSICS LETTERS B, vol.782, pp.440-467, 2018 (SCI-Expanded)

CDIII. **Electroweak production of two jets in association with a Z boson in proton-proton collisions at  $\sqrt{s}=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.78, no.7, 2018 (SCI-Expanded)

CDIV. **Azimuthal correlations for inclusive 2-jet, 3-jet, and 4-jet events in pp collisions at  $\sqrt{s}=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.78, no.7, 2018 (SCI-Expanded)

CDV. **Measurement of the underlying event activity in inclusive Z boson production in proton-proton collisions at  $\sqrt{s}=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.7, 2018 (SCI-Expanded)

CDVI. **Performance of the CMS muon detector and muon reconstruction with proton-proton collisions at  $\sqrt{s}=13$  TeV**

Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.

Journal of Instrumentation, vol.13, no.6, 2018 (SCI-Expanded)



- CDVII. **Measurement of angular parameters from the decay  $B^0 \rightarrow K^{*0}\mu^{+}\mu^{-}$  in proton-proton collisions at  $\sqrt{s}=8$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.781, pp.517-541, 2018 (SCI-Expanded)
- CDVIII. **Search for a massive resonance decaying to a pair of Higgs bosons in the four b quark final state in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.781, pp.244-269, 2018 (SCI-Expanded)
- CDIX. **Measurement of differential cross sections for the production of top quark pairs and of additional jets in lepton plus jets events from pp collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.97, no.11, 2018 (SCI-Expanded)
- CDX. **Search for lepton flavour violating decays of the Higgs boson to  $\mu\tau$  and  $e\tau$  in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, 2018 (SCI-Expanded)
- CDXI. **Search for high-mass resonances in dilepton final states in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, pp.1-43, 2018 (SCI-Expanded)
- CDXII. **Search for high-mass resonances in final states with a lepton and missing transverse momentum at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, 2018 (SCI-Expanded)
- CDXIII. **Measurements of differential cross sections of top quark pair production as a function of kinematic event variables in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, 2018 (SCI-Expanded)
- CDXIV. **Measurement of prompt and nonprompt charmonium suppression in PbPb collisions at 5.02 TeV**  
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
European Physical Journal C, vol.78, no.6, 2018 (SCI-Expanded)
- CDXV. **Search for Physics Beyond the Standard Model in Events with High-Momentum Higgs Bosons and Missing Transverse Momentum in Proton-Proton Collisions at 13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.24, 2018 (SCI-Expanded)
- CDXVI. **Search for single production of vector-like quarks decaying to a b quark and a Higgs boson**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, 2018 (SCI-Expanded)
- CDXVII. **Search for excited quarks of light and heavy flavor in gamma plus jet final states in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic

- M., Eroe J., et al.  
PHYSICS LETTERS B, vol.781, pp.390-411, 2018 (SCI-Expanded)
- CDXVIII. **Measurement of b hadron lifetimes in pp collisions at  $\sqrt{s}=8\text{TeV}$**   
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
European Physical Journal C, vol.78, no.6, 2018 (SCI-Expanded)
- CDXIX. **Search for dark matter in events with energetic, hadronically decaying top quarks and missing transverse momentum at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, 2018 (SCI-Expanded)
- CDXX. **Observation of (tt)over-barH Production**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.23, 2018 (SCI-Expanded)
- CDXXI. **Bose-Einstein correlations in pp, pPb, and PbPb collisions at root s(NN)=0.9-7 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW C, vol.97, no.6, 2018 (SCI-Expanded)
- CDXXII. **Search for single production of a vector- like T quark decaying to a Z boson and a top quark in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.781, pp.574-600, 2018 (SCI-Expanded)
- CDXXIII. **Identification of heavy-flavour jets with the CMS detector in pp collisions at 13 TeV**  
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
Journal of Instrumentation, vol.13, no.5, 2018 (SCI-Expanded)
- CDXXIV. **Search for natural and split supersymmetry in proton-proton collisions at root s=13 TeV in final states with jets and missing transverse momentum**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.5, 2018 (SCI-Expanded)
- CDXXV. **Measurement of Prompt D-0 Meson Azimuthal Anisotropy in Pb-Pb Collisions at root S-NN=5.02 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.20, 2018 (SCI-Expanded)
- CDXXVI. **Search for gauge-mediated supersymmetry in events with at least one photon and missing transverse momentum in pp collisions at ,root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.780, pp.118-143, 2018 (SCI-Expanded)
- CDXXVII. **Search for the X(5568) State Decaying into B-s(0)pi(+/-) in Proton-Proton Collisions at root s=8 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.20, 2018 (SCI-Expanded)
- CDXXVIII. **Search for supersymmetry in events with one lepton and multiple jets exploiting the angular correlation between the lepton and the missing transverse momentum in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic

- M., Eroe J., et al.  
PHYSICS LETTERS B, vol.780, pp.384-409, 2018 (SCI-Expanded)
- CDXXIX. **Evidence for the Higgs boson decay to a bottom quark-antiquark pair**  
GÜLMEZ E., KAYIŞ TOPAKSU A., DUMANOĞLU İ., CANKOÇAK K., ÖNENGÜT G., KAYA M., KAYA Ö., YETKİN E. A., ZEYREK M. T., ÖZDEMİR K., et al.  
Physics Letters B, vol.780, pp.501-532, 2018 (SCI-Expanded)
- CDXXX. **Search for a heavy right-handed W boson and a heavy neutrino in events with two same-flavor leptons and two jets root s at=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.5, 2018 (SCI-Expanded)
- CDXXXI. **Search for Heavy Neutral Leptons in Events with Three Charged Leptons in Proton-Proton Collisions at root s=13 TeV**  
Sirunyan A. M., Collaboration C. M. S., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.22, 2018 (SCI-Expanded)
- CDXXXII. **Search for a heavy resonance decaying to a pair of vector bosons in the lepton plus merged jet final state root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Drag-Icevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.5, 2018 (SCI-Expanded)
- CDXXXIII. **Search for new physics in final states with an energetic jet or a hadronically decaying W or Z boson and transverse momentum imbalance at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.97, no.9, 2018 (SCI-Expanded)
- CDXXXIV. **Jet properties in PbPb and pp collisions at root S-NN=5.02 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.5, 2018 (SCI-Expanded)
- CDXXXV. **Measurement of quarkonium production cross sections in pp collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.780, pp.251-272, 2018 (SCI-Expanded)
- CDXXXVI. **Search for Narrow Resonances in the b-Tagged Dijet Mass Spectrum in Proton-Proton Collisions at root s=8 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.20, 2018 (SCI-Expanded)
- CDXXXVII. **Search for decays of stopped exotic long-lived particles produced in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CDXXXVIII. **Search for new long-lived particles at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.780, pp.432-454, 2018 (SCI-Expanded)
- CDXXXIX. **Search for massive resonances decaying into WW, WZ, ZZ, qW, and qZ with dijet final states at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic

M., Ero J., et al.

PHYSICAL REVIEW D, vol.97, no.7, 2018 (SCI-Expanded)

**CDXL. Measurement of the Lambda(b) polarization and angular parameters in Lambda(b) -> J/psi Lambda decays from pp collisions at root s=7 and 8 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.

PHYSICAL REVIEW D, vol.97, no.7, 2018 (SCI-Expanded)

**CDXLI. Search for pair production of vector-like quarks in the  $b\bar{b}W$  channel from proton-proton collisions at  $\sqrt{s}=13$  TeV**

GÜLMEZ E., TEKTEK S., ÇERÇİ S., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZTÜRK S., SUNAR ÇERÇİ D., ÖZKORUCUKLU S., YETKİN T., et al.

Physics Letters B, vol.779, pp.82-106, 2018 (SCI-Expanded)

**CDXLII. Observation of the Higgs boson decay to a pair of  $\tau$  leptons with the CMS detector**

GÜLMEZ E., TEKTEK S., ÇERÇİ S., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZTÜRK S., SUNAR ÇERÇİ D.

Physics Letters B, vol.779, pp.283-316, 2018 (SCI-Expanded)

**CDXLIII. Measurement of associated Z + charm production in proton-proton collisions at  $\sqrt{s}=8$  TeV**

Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.

European Physical Journal C, vol.78, no.4, 2018 (SCI-Expanded)

**CDXLIV. Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at  $\sqrt{s} = 13$  TeV**

Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.

European Physical Journal C, vol.78, no.4, 2018 (SCI-Expanded)

**CDXLV. Constraints on the chiral magnetic effect using charge-dependent azimuthal correlations in pPb and PbPb collisions at the CERN Large Hadron Collider**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.

PHYSICAL REVIEW C, vol.97, no.4, 2018 (SCI-Expanded)

**CDXLVI. Search for supersymmetry with Higgs boson to diphoton decays using the razor variables at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.

PHYSICS LETTERS B, vol.779, pp.166-190, 2018 (SCI-Expanded)

**CDXLVII. Search for lepton-flavor violating decays of heavy resonances and quantum black holes to e mu final states in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.4, 2018 (SCI-Expanded)

**CDXLVIII. Suppression of Excited gamma States Relative to the Ground State in Pb-Pb Collisions at root s(NN)=5.02 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.

PHYSICAL REVIEW LETTERS, vol.120, no.14, 2018 (SCI-Expanded)

**CDXLIX. Search for vectorlike light-flavor quark partners in proton-proton collisions at root s=8 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.

PHYSICAL REVIEW D, vol.97, no.7, 2018 (SCI-Expanded)

- CDL. **Measurement of normalized differential  $t(\bar{t})$  over-bar cross sections in the dilepton channel from pp collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CDLI. **Measurement of the Splitting Function in  $t\bar{t}$  and Pb-Pb Collisions at  $\sqrt{s}=5.02$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CDLII. **Measurement of the associated production of a single top quark and a Z boson in pp collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- CDLIII. **Study of dijet events with a large rapidity gap between the two leading jets in pp collisions at  $\sqrt{s}=7$  TeV**  
 Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., Flechl M., et al.  
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- CDLIV. **Search for Higgs boson pair production in events with two bottom quarks and two tau leptons in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 GÜLMEZ E., KAYIŞ TOPAKSU A., DUMANOĞLU İ., CANKOÇAK K., ÖNENGÜT G., KAYA M., KAYA Ö., YETKİN E. A., ZEYREK M. T., TEKTEK S.  
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- CDLV. **Search for new phenomena in final states with two opposite-charge, same-flavor leptons, jets, and missing transverse momentum in pp collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CDLVI. **Search for ZZ resonances in the  $2l2\nu$  final state in proton-proton collisions at 13 TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CDLVII. **Combined search for electroweak production of charginos and neutralinos in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CDLVIII. **Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CDLIX. **Measurement of the inclusive  $t(\bar{t})$  over-bar cross section in pp collisions  $\sqrt{s}=5.02$  TeV using final states with at least one charged lepton**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CDLX. **Measurement of differential cross sections in the kinematic angular variable  $\phi^*$  for inclusive Z boson production in pp collisions at  $\sqrt{s}=8$  TeV**

- Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.3, 2018 (SCI-Expanded)
- CDLXI. **Search for the pair production of third-generation squarks with two-body decays to a bottom or charm quark and a neutralino in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.778, pp.263-291, 2018 (SCI-Expanded)
- CDLXII. **Search for natural supersymmetry in events with top quark pairs and photons in pp collisions at root s=8 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.3, 2018 (SCI-Expanded)
- CDLXIII. **Comparing transverse momentum balance of b jet pairs in pp and PbPb collisions at root s(NN)=5.02 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- CDLXIV. **Search for pair production of excited top quarks in the lepton plus jets final state The CMS Collaboration**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.778, pp.349-370, 2018 (SCI-Expanded)
- CDLXV. **Search for top squarks and dark matter particles in opposite-charge dilepton final states at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW D, vol.97, no.3, 2018 (SCI-Expanded)
- CDLXVI. **Search for supersymmetry in events with at least three electrons or muons, jets, and missing transverse momentum in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.2, 2018 (SCI-Expanded)
- CDLXVII. **Constraintson the double-parton scattering cross section from same-sign W boson pair production in proton-proton collisions at root s=8TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- CDLXVIII. **Observation of Electroweak Production of Same-Sign W Boson Pairs in the Two Jet and Two Same-Sign Lepton Final State in Proton-Proton Collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.8, 2018 (SCI-Expanded)
- CDLXIX. **Search for standard model production of four top quarks with same-sign and multilepton final states in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
European Physical Journal C, vol.78, no.2, 2018 (SCI-Expanded)
- CDLXX. **Measurements of the  $p p \rightarrow Z Z$  production cross section and the  $Z \rightarrow 4 \ell$  branching fraction, and constraints on anomalous triple gauge couplings at  $\sqrt{s}=13\text{TeV}$**   
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M.,

- Erö J., et al.  
European Physical Journal C, vol.78, no.2, 2018 (SCI-Expanded)
- CDLXXI. **Observation of Correlated Azimuthal Anisotropy Fourier Harmonics in pp and p plus Pb Collisions at the LHC**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.9, 2018 (SCI-Expanded)
- CDLXXII. **Inclusive Search for a Highly Boosted Higgs Boson Decaying to a Bottom Quark-Antiquark Pair**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.7, 2018 (SCI-Expanded)
- CDLXXIII. **Search for Higgsino pair production in pp collisions at root s=13 TeV in final states with large missing transverse momentum and two Higgs bosons decaying via  $H \rightarrow b\bar{b}$**   
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW D, vol.97, no.3, 2018 (SCI-Expanded)
- CDLXXIV. **Search for the flavor-changing neutral current interactions of the top quark and the Higgs boson which decays into a pair of b quarks at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- CDLXXV. **Brightness and uniformity measurements of plastic scintillator tiles at the CERN H2 test beam**  
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- CDLXXVI. **Measurements of  $t\bar{t}$  cross sections in association with b jets and inclusive jets and their ratio using dilepton final states in pp collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.  
PHYSICS LETTERS B, vol.776, pp.355-378, 2018 (SCI-Expanded)
- CDLXXVII. **Azimuthal anisotropy of charged particles with transverse momentum up to 100GeV/c in PbPb collisions at root s-NN=5.02 TeV**  
TALI B., DUMANOĞLU İ., KAYA M.  
Physics Letters B, vol.776, pp.195-216, 2018 (SCI-Expanded)
- DLXXVIII. **Pseudorapidity distributions of charged hadrons in proton-lead collisions at root s(NN)=5.02 and 8.16 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.1, 2018 (SCI-Expanded)
- CDLXXIX. **Search for resonant and nonresonant Higgs boson pair production in the  $b\bar{b}l\nu l\nu$  final state in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.1, 2018 (SCI-Expanded)
- CDLXXX. **Search for supersymmetry in proton-proton collisions at 13 TeV using identified top quarks**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- CDLXXXI. **Search for  $t\bar{t}H$  production in the all-jet final state in proton-proton collisions root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.

- JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, pp.1-45, 2018 (SCI-Expanded)
- CDLXXXII. **Observation of Top Quark Production in Proton-Nucleus Collisions**  
GÜLMEZ E., ÇERÇİ S., KAYA Ö., KAYA M., KAYIŞ TOPAKSU A., ÖZTÜRK S., TEKTEK S., SUNAR ÇERÇİ D.  
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- DLXXXIII. **Constraints on anomalous Higgs boson couplings using production and decay information in the four-lepton final state**  
Sirunyan A. M., Collaboration C. M. S., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., et al.  
PHYSICS LETTERS B, vol.775, pp.1-24, 2017 (SCI-Expanded)
- DLXXXIV. **Search for Evidence of the Type-III Seesaw Mechanism in Multilepton Final States in Proton-Proton Collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.119, no.22, 2017 (SCI-Expanded)
- CDLXXXV. **Search for a heavy composite Majorana neutrino in the final state with two leptons and two quarks at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.775, pp.315-337, 2017 (SCI-Expanded)
- DLXXXVI. **Search for supersymmetry in events with at least one photon, missing transverse momentum, and large transverse event activity in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.12, 2017 (SCI-Expanded)
- DLXXXVII. **Principal-component analysis of two-particle azimuthal correlations in PbPb and pPb collisions at CMS**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW C, vol.96, no.6, 2017 (SCI-Expanded)
- DLXXXVIII. **Search for dark matter produced in association with heavy-flavor quark pairs in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., Flechl M., et al.  
European Physical Journal C, vol.77, no.12, 2017 (SCI-Expanded)
- DLXXXIX. **Measurement of charged pion, kaon, and proton production in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.  
PHYSICAL REVIEW D, vol.96, no.11, 2017 (SCI-Expanded)
- CDXC. **Radioactive source calibration test of the CMS Hadron Endcap Calorimeter test wedge with Phase I upgrade electronics**  
Chatrchyan S., Sirunyan A. M., Tumasyan A., Litomin A., Mossolov V., Shumeiko N., De Klundert M. V., Van Haeveermaet H., Van Mechelen P., Van Spilbeeck A., et al.  
JOURNAL OF INSTRUMENTATION, vol.12, 2017 (SCI-Expanded)
- CDXCI. **Search for electroweak production of charginos and neutralinos in WH events in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.11, 2017 (SCI-Expanded)
- CDXCII. **Search for pair production of vector-like T and B quarks in single-lepton final states using boosted jet substructure in proton-proton collisions at root s=13 TeV**



Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.11, 2017 (SCI-Expanded)

CDXCIII. **Search for black holes and other new phenomena in high-multiplicity final states in proton-proton collisions at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.

PHYSICS LETTERS B, vol.774, pp.279-307, 2017 (SCI-Expanded)

CDXCIV. **Measurements of the associated production of a Z boson and b jets in pp collisions at  $\sqrt{s}=8$ TeV**

Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.

European Physical Journal C, vol.77, no.11, 2017 (SCI-Expanded)

CDXCV. **Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at  $s=13$   $\sqrt{s}=13$  TeV**

GÜLMEZ E., KAYA Ö., CANKOÇAK K., ZEYREK M. T., ÇERÇİ S., YETKİN T., KAYA M., ÖZTÜRK S., KAYIŞ TOPAKSU A., TEKLEN S., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, 2017 (SCI-Expanded)

CDXCVI. **Measurement of the triple-differential dijet cross section in proton-proton collisions at  $\sqrt{s}=8$ TeV and constraints on parton distribution functions**

Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., Flechl M., et al.

European Physical Journal C, vol.77, no.11, 2017 (SCI-Expanded)

CDXCVII. **Combination of searches for heavy resonances decaying to WW, WZ, ZZ, WH, and ZH boson pairs in proton-proton collisions at root  $s=8$  and 13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.

PHYSICS LETTERS B, vol.774, pp.533-558, 2017 (SCI-Expanded)

CDXCVIII. **Measurement of vector boson scattering and constraints on anomalous quartic couplings from events with four leptons and two jets in proton-proton collisions at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

PHYSICS LETTERS B, vol.774, pp.682-705, 2017 (SCI-Expanded)

CDXCIX. **Search for new physics in the monophoton final state in proton-proton collisions at root  $s=13$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.10, 2017 (SCI-Expanded)

D. **Particle-flow reconstruction and global event description with the CMS detector**

GÜLMEZ E., CANKOÇAK K., ÇERÇİ S., YETKİN T., KAYA M., ÖZTÜRK S., KAYA Ö.

Journal Of Instrumentation, vol.12, pp.10003, 2017 (SCI-Expanded)

DI. **Measurements of jet charge with dijet events in pp collisions at root  $s=8$  TeV**

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DIII. **Measurement of the B-+/- Meson Nuclear Modification Factor in Pb-Pb Collisions at root  $s(NN)=5.02$  TeV**

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- DXXVII. **Search for single production of a heavy vector-like T quark decaying to a Higgs boson and a top quark with a lepton and jets in the final state**  
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- DXLIII. **Measurement of double-differential cross sections for top quark pair production in pp collisions at root  $s=8\text{TeV}$  and impact on parton distribution functions**  
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**DXLVI. Search for dijet resonances in proton-proton collisions at root s=13 TeV and constraints on dark matter and other models**

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**DLI. A search for new phenomena in pp collisions at root s=13TeV in final states with missing transverse momentum and at least one jet using the alpha(T) variable**

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**DLII. Search for narrow resonances in dilepton mass spectra in proton-proton collisions at root(s) = 13 TeV and combination with 8 TeV data**

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**DLIII. Measurement of the top quark mass using single top quark events in proton-proton collisions at root s=8 TeV**

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- DLIX. **Measurement of the WZ production cross section in pp collisions at  $\sqrt{s}=7$  and 8 TeV and search for anomalous triple gauge couplings at  $\sqrt{s}=8$  TeV**  
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- DLXIV. **Search for massive resonances decaying in to WW,WZ or ZZ bosons in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
DUMANOĞLU İ., KAYA M., TALİ B., YETKİN T., GÜLMEZ E., GÜLER A. M., KAYIŞ TOPAKSU A., TOPAKLI H., ÖZTÜRK S., İŞILDAK B., et al.  
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- DLXV. **Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at  $\sqrt{s}=8$  TeV and cross section ratios to 2.76 and 7 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erofeev J., et al.  
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- DLXVI. **Search for CP violation in  $t(\bar{t})$  production and decay in proton-proton collisions at  $\sqrt{s}=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erofeev J., et al.

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DLXVII. **Search for dark matter and unparticles in events with a Z boson and missing transverse momentum in proton-proton collisions at root s=13 TeV**

Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.

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DLXVIII. **Measurements of differential cross sections for associated production of a W boson and jets in proton-proton collisions at root s=8 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

PHYSICAL REVIEW D, vol.95, no.5, 2017 (SCI-Expanded)

DLXIX. **Measurement of the  $t(\bar{t})$  production cross section using events in the  $e\mu$  final state in pp collisions at root s=13 TeV**

DUMANOĞLU İ., KAYA M., TALİ B., GÜLMEZ E., KAYIŞ TOPAKSU A., ÖZTÜRK S., HOŞ İ., KANGAL E. E., ÖZDEMİR K., ZEYREK M. T., et al.

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DLXX. **Search for heavy neutrinos or third-generation leptoquarks in final states with two hadronically decaying tau leptons and two jets in proton-proton collisions at root s=13 TeV**

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DLXXI. **Measurement of the WZ production cross section in pp collisions at root s=13 TeV**

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DLXXII. **Observation of Charge-Dependent Azimuthal Correlations in p-Pb Collisions and Its Implication for the Search for the Chiral Magnetic Effect**

DUMANOĞLU İ., KAYA M., TALİ B., GÜLMEZ E., KAYIŞ TOPAKSU A., KANGAL E. E., HOŞ İ., ÖZDEMİR K., İŞILDAK B., ÖCALAN K., et al.

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DLXXIII. **Search for top quark decays via Higgs-boson-mediated flavor-changing neutral currents in pp collisions at root s=8 TeV**

DUMANOĞLU İ., KAYA M., TALİ B., GÜLMEZ E., KAYIŞ TOPAKSU A., KANGAL E. E., HOŞ İ., ÖZDEMİR K., ZEYREK M. T., İŞILDAK B., et al.

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DLXXIV. **Search for anomalous Wtb couplings and flavour-changing neutral currents in t-channel single top quark production in pp collisions at root s=7 and 8 TeV**

DUMANOĞLU İ., KAYA M., TALİ B., GÜLMEZ E., KAYIŞ TOPAKSU A., ÖZTÜRK S., KANGAL E. E., HOŞ İ., ÖZDEMİR K., ZEYREK M. T., et al.

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DLXXV. **Jet energy scale and resolution in the CMS experiment in pp collisions at 8 TeV**

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Journal Of Instrumentation, vol.12, pp.2014, 2017 (SCI-Expanded)

DLXXVI. **Measurement of the transverse momentum spectra of weak vector bosons produced in proton-proton collisions at root s=8TeV**

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DLXXVII. **Measurement of the production cross section of a W boson in association with two b jets in pp collisions at root s=8TeV**



- Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- DLXXVIII. **Evidence for collectivity in pp collisions at the LHC**  
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- DLXXIX. **Searches for invisible decays of the Higgs boson in pp collisions at root S=7, 8, and 13 TeV**  
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- DLXXX. **Search for heavy resonances decaying to tau lepton pairs in proton-proton collisions at root s=13 TeV**  
DUMANOĞLU İ., KAYA M., GÜLMEZ E., KAYIŞ TOPAKSU A., ÖZDEMİR K., HOŞ İ., IŞILDAK B., CANKOÇAK K., ÇAKIR M. A., ŞEN S., et al.  
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- DLXXXI. **The CMS trigger system**  
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- DLXXXII. **Search for Dark Matter and Supersymmetry with a Compressed Mass Spectrum in the Vector Boson Fusion Topology in Proton-Proton Collisions at root s=8 TeV**  
DUMANOĞLU İ., KAYA M., TALİ B., GÜLMEZ E., KAYIŞ TOPAKSU A., KANGAL E. E., HOŞ İ., ÖZDEMİR K., ZEYREK M. T., IŞILDAK B., et al.  
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- DLXXXIII. **Inclusive search for supersymmetry using razor variables in pp collisions at root s=13 TeV**  
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- DLXXXIV. **Search for supersymmetry in events with one lepton and multiple jets in proton-proton collisions at root s=13 TeV**  
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- DLXXXV. **Observation of the decay  $B^+ \rightarrow \psi(2S)\phi(1020)K^+$  in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- DLXXXVI. **Measurements of the  $t(\bar{t})$  production cross section in lepton plus jets final states in pp collisions at 8 and ratio of 8 to 7 cross sections**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- DLXXXVII. **Search for R-parity violating supersymmetry with displaced vertices in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.95, no.1, 2017 (SCI-Expanded)
- DLXXXVIII. **Search for high-mass Z gamma resonances in  $e^+e^- \rightarrow \gamma$  and  $\mu^+\mu^- \rightarrow \gamma$  final states in proton-proton collisions at root s=8 and 13 TeV**  
DUMANOĞLU İ., KAYA M., GÜLMEZ E., KAYIŞ TOPAKSU A., KANGAL E. E., ÖZDEMİR K., ZEYREK M. T., IŞILDAK B.,

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- DLXXXIX. **Search for new physics in final states with two opposite-sign, same-flavor leptons, jets, and missing transverse momentum in pp collisions at TeV**  
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
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- DXC. **Search for dark matter particles in proton-proton collisions at root  $s = 8$  TeV using the razor variables**  
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
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- DXCI. **Measurement of the mass of the top quark in decays with a J/psi meson in pp collisions 8 TeV**  
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- DXCII. **Search for lepton flavour violating decays of the Higgs boson to e tau and e mu in proton-proton collisions at root  $s=8$  TeV**  
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- DXCIII. **Searches for R-parity-violating supersymmetry in pp collisions at root  $s=8$  TeV in final states with 0-4 leptons**  
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
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- DXCIV. **Studies of inclusive four-jet production with two b-tagged jets in proton-proton collisions at 7 TeV**  
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- DXCV. **Search for dark matter in proton-proton collisions at 8 TeV with missing transverse momentum and vector boson tagged jets**  
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- DXCVI. **Measurement of the ZZ production cross section and  $Z \rightarrow l^{(+)}l^{(-)}l'^{(+)}l''^{(-)}$  branching fraction in pp collisions at root  $s=13$  TeV**  
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- DXCVII. **Search for long-lived charged particles in proton-proton collisions at root  $s=13$  TeV**  
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
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- DXCVIII. **Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at root  $s(NN)=2.76$  TeV**  
 Ruiz Vargas J. C., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., et al.  
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- DXCIX. **Measurement of electroweak production of a W boson and two forward jets in proton-proton collisions at root  $s=8$  TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.11, 2016 (SCI-Expanded)

- DC. **Measurement of the W boson helicity fractions in the decays of top quark pairs to lepton plus jets final states produced in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
PHYSICS LETTERS B, vol.762, pp.512-534, 2016 (SCI-Expanded)
- DCI. **Upsilon (nS) polarizations versus particle multiplicity in pp collisions at root s=7 TeV**  
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- DCII. **Dose rate effects in the radiation damage of the plastic scintillators of the CMS hadron endcap calorimeter**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Litomin A., Mossolov V., Shumeiko N., Van de Klundert M., Van Haeveermaet H., Van Mechelen P., Van Spilbeeck A., et al.  
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- DCIII. **Search for new physics with the M-T2 variable in all-jets final states produced in pp collisions at root s=13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
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- DCIV. **Measurement of the integrated and differential t(t)over-bar production cross sections for high-p(T) top quarks in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
PHYSICAL REVIEW D, vol.94, no.7, 2016 (SCI-Expanded)
- DCV. **Phenomenological MSSM interpretation of CMS searches in pp collisions at root s=7 and 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
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- DCVI. **Search for R-parity violating decays of a top squark in proton-proton collisions at root s=8TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
PHYSICS LETTERS B, vol.760, pp.178-201, 2016 (SCI-Expanded)
- DCVII. **Search for two Higgs bosons in final states containing two photons and two bottom quarks in proton-proton collisions at 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
PHYSICAL REVIEW D, vol.94, no.5, 2016 (SCI-Expanded)
- DCVIII. **Measurement of the Z gamma -> nu(nu)over-bar gamma production cross section in pp collisions at root s=8 TeV and limits on anomalous ZZ gamma and Z gamma gamma trilinear gauge boson couplings**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
PHYSICS LETTERS B, vol.760, pp.448-468, 2016 (SCI-Expanded)
- DCIX. **Search for Higgs boson off-shell production in proton-proton collisions at 7 and 8 TeV and derivation of constraints on its total decay width**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroev J., et al.  
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- DCX. **Measurement of dijet azimuthal decorrelation in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- DCXI. **Measurements of  $t\bar{t}$  over bar charge asymmetry using dilepton final states in pp collisions at root s 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., CANKOÇAK K., GÜLMEZ E., KAYA M., KAYA Ö., et al.  
Physics Letter B, vol.760, pp.365-386, 2016 (SCI-Expanded)
- DCXII. **Search for s channel single top quark production in pp collisions at root s=7 and 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- DCXIII. **Evidence for exclusive  $\gamma\gamma \rightarrow W(+)\bar{W}(-)$  production and constraints on anomalous quartic gauge couplings in pp collisions at and 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- DCXIV. **Search for new physics in same-sign dilepton events in proton-proton collisions at root s=13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- DCXV. **Azimuthal decorrelation of jets widely separated in rapidity in pp collisions at root s=7 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- DCXVI. **Search for supersymmetry in events with soft leptons, low jet multiplicity, and missing transverse energy in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.759, pp.9-35, 2016 (SCI-Expanded)
- DCXVII. **Measurement of the inelastic cross section in proton-lead collisions at root s(NN)=5.02 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.759, pp.641-662, 2016 (SCI-Expanded)
- DCXVIII. **Measurement of the  $t(\bar{t})$  over-bar production cross section in the e mu channel in proton-proton collisions at root s=7 and 8 TeV**  
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- DCXIX. **Measurement of the double-differential inclusive jet cross section in proton-proton collisions at root s=13TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- DCXX. **Search for supersymmetry in electroweak production with photons and large missing transverse energy in pp collisions at root s=8TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.759, pp.479-500, 2016 (SCI-Expanded)
- DCXXI. **Search for supersymmetry in pp collisions at root s=13 TeV in the single-lepton final state using the**

**sum of masses of large-radius jets**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.

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- DCXXII. **Measurements of the Higgs boson production and decay rates and constraints on its couplings from a combined ATLAS and CMS analysis of the LHC pp collision data at  $\sqrt{s} = 7$  and 8 TeV**  
The ATLAS collaboration A., Aad G., Abbott B., Abdallah J., Abidinov O., Abeloos B., Aben R., AbouZeid O., Abraham N., Abramowicz H., et al.  
Journal of High Energy Physics, vol.2016, no.8, 2016 (SCI-Expanded)
- DCXXIII. **Combined search for anomalous pseudoscalar HW couplings in  $VH(H \rightarrow b\bar{b})$  production and  $H \rightarrow VV$  decay**  
Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., Friedl M., Fruhwirth R., et al.  
PHYSICS LETTERS B, vol.759, pp.672-696, 2016 (SCI-Expanded)
- DCXXIV. **Search for neutral resonances decaying into a Z boson and a pair of b jets or tau leptons**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.759, pp.369-394, 2016 (SCI-Expanded)
- DCXXV. **Measurement of the differential cross section and charge asymmetry for inclusive  $pp \rightarrow W^{+/-} + X$  production at  $\sqrt{s} = 8$  TeV**  
Khachatryan V. y., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.8, 2016 (SCI-Expanded)
- DCXXVI. **Study of Z boson production in pPb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.759, pp.36-57, 2016 (SCI-Expanded)
- DCXXVII. **Search for direct pair production of supersymmetric top quarks decaying to all-hadronic final states in pp collisions at  $\sqrt{s} = 8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- DCXXVIII. **Search for direct pair production of scalar top quarks in the single- and dilepton channels in proton-proton collisions at  $\sqrt{s} = 8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- DCXXIX. **Measurement of inclusive jet production and nuclear modifications in pPb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- DCXXX. **Search for Narrow Resonances in Dijet Final States at  $\sqrt{s} = 8$  TeV with the Novel CMS Technique of Data Scouting**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
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- DCXXXI. **Search for Resonant Production of High-Mass Photon Pairs in Proton-Proton Collisions at  $\sqrt{s} = 8$  and 13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.

PHYSICAL REVIEW LETTERS, vol.117, no.5, 2016 (SCI-Expanded)

- DCXXXII. **Search for heavy resonances decaying to two Higgs bosons in final states containing four b quarks**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- DCXXXIII. **Search for a low-mass pseudoscalar Higgs boson produced in association with a b(b)over-bar pair in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.758, pp.296-320, 2016 (SCI-Expanded)
- DCXXXIV. **Measurement of spin correlations in tt production using the matrix element method in the muon plus jets final state in pp collisions at root S=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.758, pp.321-346, 2016 (SCI-Expanded)
- DCXXXV. **Search for supersymmetry in the multijet and missing transverse momentum final state in pp collisions at 13 TeV**  
Khachatryan v., Sirunyan A. M., Tumasyan A., Adam W., Aşilar E., Bergauer T., Flechl M., CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., et al.  
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- DCXXXVI. **Measurement of the W+W- cross section in pp collisions at root s=8 TeV and limits on anomalous gauge couplings**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- DCXXXVII. **Measurement of t(t)over-bar production with additional jet activity, including b quark jets, in the dilepton decay channel using pp collisions at root s=8TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- DCXXXVIII. **Inclusive and differential measurements of the t t over bar charge asymmetry in pp collisions at root s 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aşilar E., Bergauer T., Flechl M., Matsushita T., ÇERÇİ S., CANKOÇAK K., et al.  
Physics Letters B, vol.757, pp.154-179, 2016 (SCI-Expanded)
- DCXXXIX. **Search for lepton flavour violating decays of heavy resonances and quantum black holes to an e mu pair in proton-proton collisions at root s=8 TeV**  
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- DCXL. **Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at root s=8 TeV**  
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- DCXLI. **Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.757, pp.6-31, 2016 (SCI-Expanded)
- DCXLII. **Search for pair-produced vectorlike B quarks in proton-proton collisions at root s=8 TeV**

- Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
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- DCXLIII. **Measurement of the inclusive jet cross section in pp collisions at root s=2.76 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
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- DCXLIV. **Measurement of the ratio  $B(B\text{-}s(0) \rightarrow J/\psi f(0)(980))/B(B\text{-}s(0) \rightarrow J/\psi \phi(1020))$  in pp collisions at root s=7 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Friedl M., Fruehwirth R., Ghete V. M., et al  
PHYSICS LETTERS B, vol.756, pp.84-102, 2016 (SCI-Expanded)
- DCXLV. **Measurement of the top quark mass using charged particles in pp collisions at root s 8 TeV**  
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Jeitler M., Flechl M., CANKOÇAK K., ÇERÇİ S., et al  
Physical Review D, vol.93, 2016 (SCI-Expanded)
- DCXLVI. **Search for supersymmetry in pp collisions at root s=8 TeV in final states with boosted W bosons and b jets using razor variables**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
PHYSICAL REVIEW D, vol.93, no.9, 2016 (SCI-Expanded)
- DCXLVII. **Search for heavy Majorana neutrinos in  $e(+/-)e(+/-)+$  jets and  $e(+/-) \mu(+/-)$  +jetsevents in proton-proton collisions at root s=8TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
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- DCXLVIII. **Search for massive WH resonances decaying into the  $l \nu b(\bar{b})$  final state at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
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- DCXLIX. **Searches for a heavy scalar boson H decaying to a pair of 125 GeV Higgs bosons hh or for a heavy pseudoscalar boson A decaying to Zh, in the final states with  $h \rightarrow \tau \tau$**   
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
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- DCL. **Measurement of the top quark mass using proton-proton data at root(s)=7 and 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
PHYSICAL REVIEW D, vol.93, no.7, 2016 (SCI-Expanded)
- DCLI. **Search for anomalous single top quark production in association with a photon in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
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- DCLII. **Search for new phenomena in monophoton final states in proton proton collisions at root s 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Flechl M., Jeitler M., CANKOÇAK K., ÇERÇİ S., et al  
Physics Letters B, vol.755, pp.102-124, 2016 (SCI-Expanded)
- DCLIII. **Search for  $W'$  decaying to tau lepton and neutrino in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al

- PHYSICS LETTERS B, vol.755, pp.196-216, 2016 (SCI-Expanded)
- DCLIV. **Measurement of top quark polarisation in t-channel single top quark production**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.4, 2016 (SCI-Expanded)
- DCLV. **Measurement of Long-Range Near-Side Two-Particle Angular Correlations in pp Collisions at root s=13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW LETTERS, vol.116, no.17, 2016 (SCI-Expanded)
- DCLVI. **Search for dark matter and unparticles produced in association with a Z boson in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.93, no.5, 2016 (SCI-Expanded)
- DCLVII. **Measurement of the t(t)over-bar production cross section in the all-jets final state in pp collisions at root s=8TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.3, 2016 (SCI-Expanded)
- DCLVIII. **Measurements of t(t)over-bar spin correlations and top quark polarization using dilepton final states in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.93, no.5, 2016 (SCI-Expanded)
- DCLIX. **Transverse momentum spectra of inclusive b jets in pPb collisions atv root s(NN)=5.02 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.754, pp.59-80, 2016 (SCI-Expanded)
- DCLX. **Search for excited leptons in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.3, 2016 (SCI-Expanded)
- DCLXI. **Event generator tunes obtained from underlying event and multiparton scattering measurements**  
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
European Physical Journal C, vol.76, no.3, 2016 (SCI-Expanded)
- DCLXII. **Search for a massive resonance decaying into a Higgs boson and a W or Z boson in hadronic final states in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.2, pp.1-41, 2016 (SCI-Expanded)
- DCLXIII. **Search for Narrow Resonances Decaying to Dijets in Proton-Proton Collisions at root s=13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.116, no.7, 2016 (SCI-Expanded)
- DCLXIV. **Search for pair production of first and second generation leptoquarks in proton proton collisions at root s 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Martin F., CANKOÇAK K., ÇERÇİ S., GÜLMEZ E., et al.  
Physical Review D, vol.93, 2016 (SCI-Expanded)



- DCLXV. **The transverse momentum dependence of charged kaon Bose-Einstein correlations in the SELEX experiment**  
Nigmatkulov G. A., Ponosovi A. K., Akgun U., Alkhazov G., Amaro-Reyes J., Asratyan A., Atamantchouk A. G., Ayan A. S., Balatz M. Y., Blanco-Covarrubias A., et al.  
PHYSICS LETTERS B, vol.753, pp.458-464, 2016 (SCI-Expanded)
- DCLXVI. **Search for single production of scalar leptoquarks in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW D, vol.93, no.3, 2016 (SCI-Expanded)
- DCLXVII. **Search for  $W^- \rightarrow tb$  in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.2, pp.1-42, 2016 (SCI-Expanded)
- DCLXVIII. **Measurement of the charge asymmetry in top quark pair production in pp collisions at root s=8 TeV using a template method**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW D, vol.93, no.3, 2016 (SCI-Expanded)
- DCLXIX. **Search for a Higgs boson decaying into  $\gamma^*\gamma \rightarrow ll$  with low dilepton mass in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.753, pp.341-362, 2016 (SCI-Expanded)
- DCLXX. **Search for exotic decays of a Higgs boson into undetectable particles and one or more photons**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.753, pp.363-388, 2016 (SCI-Expanded)
- DCLXXI. **Search for the production of an excited bottom quark decaying to  $tW$  in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.1, pp.1-44, 2016 (SCI-Expanded)
- DCLXXII. **Study of B Meson Production in p plus Pb Collisions at root s(NN)=5.02 TeV Using Exclusive Hadronic Decays**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW LETTERS, vol.116, no.3, 2016 (SCI-Expanded)
- DCLXXIII. **Search for resonant  $t(\bar{t})$  production in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW D, vol.93, no.1, 2016 (SCI-Expanded)
- DCLXXIV. **Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into tau leptons in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.1, pp.1-46, 2016 (SCI-Expanded)
- DCLXXV. **Observation of top quark pairs produced in association with a vector boson in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.1, 2016 (SCI-Expanded)

- DCLXXVI. **Reconstruction and identification of tau lepton decays to hadrons and  $\nu(\tau)$  at CMS**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
JOURNAL OF INSTRUMENTATION, vol.11, 2016 (SCI-Expanded)
- DCLXXVII. **Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at root  $s(\text{NN})=2.76$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.1, pp.1-52, 2016 (SCI-Expanded)
- DCLXXVIII. **Search for neutral MSSM Higgs bosons decaying to  $\mu(+)\mu(-)$  in pp collisions at root  $s=7$  and 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICS LETTERS B, vol.752, pp.221-246, 2016 (SCI-Expanded)
- DCLXXIX. **Production of leading charged particles and leading charged-particle jets at small transverse momenta in pp collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Friedl M., Fruehwirth R., Ghete V. M., et al.  
PHYSICAL REVIEW D, vol.92, no.11, 2015 (SCI-Expanded)
- DCLXXX. **Pseudorapidity distribution of charged hadrons in proton-proton collisions at root  $s=13$ TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICS LETTERS B, vol.751, pp.143-163, 2015 (SCI-Expanded)
- DCLXXXI. **Search for a light charged Higgs boson decaying to  $c(\bar{s})$  in pp collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2015, no.12, pp.1-37, 2015 (SCI-Expanded)
- DCLXXXII. **Search for diphoton resonances in the mass range from 150 to 850 GeV in pp collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICS LETTERS B, vol.750, pp.494-519, 2015 (SCI-Expanded)
- DCLXXXIII. **Study of W boson production in pPb collisions at root  $(\text{NN})-N-S=5.02$  TeV**  
Adam W., Bergauer T., Dragicevic M., Eroo J., Friedl M., Fruehwirth R., Ghete V. M., Hartl C., Hoermann N., Hrubec J., et al.  
PHYSICS LETTERS B, vol.750, pp.565-586, 2015 (SCI-Expanded)
- DCLXXXIV. **Search for supersymmetry in the vector-boson fusion topology in proton-proton collisions at root  $s=8$ TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2015, no.11, pp.1-42, 2015 (SCI-Expanded)
- DCLXXXV. **Angular coefficients of Z bosons produced in pp collisions at root  $S=8$  TeV and decaying to  $\mu(+)\mu(-)$  as a function of transverse momentum and rapidity**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Friedl M., Fruehwirth R., Ghete V. M., et al.  
PHYSICS LETTERS B, vol.750, pp.154-175, 2015 (SCI-Expanded)
- DCLXXXVI. **Search for neutral MSSM Higgs bosons decaying into a pair of bottom quarks**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.2015, no.11, pp.1-43, 2015 (SCI-Expanded)
- DCLXXXVII. **Measurement of the differential cross section for top quark pair production in pp collisions at root**

**s=8TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Friedl M., Fruehwirth R., Ghete V. M., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.75, no.11, 2015 (SCI-Expanded)

.LXXXVIII. **Search for a charged Higgs boson in pp collisions at root s=8 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2015, no.11, pp.1-64, 2015 (SCI-Expanded)

CLXXXIX. **Measurements of the Upsilon(1S), Upsilon(2S), and Upsilon(3S) differential cross sections in pp collisions at root s=7 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Friedl M., Fruehwirth R., Ghete V. M., et al.

PHYSICS LETTERS B, vol.749, pp.14-34, 2015 (SCI-Expanded)

DCXC. **Search for supersymmetry with photons in pp collisions at root s=8 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.

PHYSICAL REVIEW D, vol.92, no.7, 2015 (SCI-Expanded)

DCXCI. **Search for a Higgs boson in the mass range from 145 to 1000 GeV decaying to a pair of W or Z bosons**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2015, no.10, pp.1-52, 2015 (SCI-Expanded)

DCXCII. **Search for resonant pair production of Higgs bosons decaying to two bottom quark-antiquark pairs in proton-proton collisions at 8TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Friedl M., Fruehwirth R., Ghete V. M., et al.

PHYSICS LETTERS B, vol.749, pp.560-582, 2015 (SCI-Expanded)

DCXCIII. **Measurements of the ZZ production cross sections in the 2l2 nu channel in proton-proton collisions at root s=7 and 8 TeV and combined constraints on triple gauge couplings**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Friedl M., Fruehwirth R., Ghete V. M., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.75, no.10, 2015 (SCI-Expanded)

DCXCIV. **Measurement of the Z boson differential cross section in transverse momentum and rapidity in proton-proton collisions at 8 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Friedl M., Fruehwirth R., Ghete V. M., et al.

PHYSICS LETTERS B, vol.749, pp.187-209, 2015 (SCI-Expanded)

DCXCV. **Search for lepton flavour violating decays of the Higgs boson**

Vardan K., Erhan G., Ozlem K., kerem c., KAYA M.

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- DCCCXCV. **Measurement of the cross section and angular correlations for associated production of a Z boson**

**with b hadrons in pp collisions at root s=7 TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2013, no.12, 2013 (SCI-Expanded)

10CCCXCVI. **Observation of a new boson with mass near 125 GeV in pp collisions at  $\sqrt{s}=7$  and 8 TeV**

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

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CCCXCVII. **Forward-backward asymmetry of Drell-Yan lepton pairs in pp collisions at root s=7 TeV**

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10CCXCVIII. **Measurement of the Azimuthal Anisotropy of Neutral Pions in Pb-Pb Collisions at root S-NN=2.76 TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroo J., Fabjan C., et al.

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10CCCXCIX. **Measurement of the hadronic activity in events with a Z and two jets and extraction of the cross section for the electroweak production of a Z with two jets in pp collisions at root s=7 TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.

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CM. **Measurement of the  $t(\bar{t})$  production cross section in the all-jet final state in pp collisions at root s=7 TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroo J., Fabjan C., et al.

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CMII. **Measurement of the ZZ production cross section and search for anomalous couplings in 2l2l' final states in pp collisions at root s=7 TeV**

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CMIII. **Search for heavy lepton partners of neutrinos in proton-proton collisions in the context of the type III seesaw mechanism**

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CMIII. **A New Boson with a Mass of 125 GeV Observed with the CMS Experiment at the Large Hadron Collider**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroo J., Fabjan C., et al.

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CMIV. **Combined search for the quarks of a sequential fourth generation**

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CMV. **Search for Heavy Neutrinos and W-R Bosons with Right-Handed Couplings in a Left-Right Symmetric Model in pp Collisions at root s=7 TeV**

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- CMVII. **Measurement of the top-quark mass in t(t)over-bar events with lepton plus jets final states in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroev J., Fabjan C., et al.  
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- CMVIII. **Search for a fermiophobic Higgs boson in pp collisions at root s=7 TeV**  
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- CMIX. **Measurement of the relative prompt production rate of chi(c2) and chi(c1) in pp collisions at root s=7 TeV**  
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- CMX. **Electron-muon identification by atmospheric shower in a new concept of an EAS detector**  
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- CMXI. **Ratios of dijet production cross sections as a function of the absolute difference in rapidity between jets in proton-proton collisions at root s=7 TeV**  
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- CMXII. **Search for electroweak production of charginos and neutralinos using leptonic final states in pp collisions at root s=7 TeV**  
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- CMXIII. **A search for a doubly-charged Higgs boson in pp collisions at root s=7 TeV**  
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- CMXIV. **Observation of Sequential upsiion Suppression in PbPb Collisions**  
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- CMXVI. **Search for heavy Majorana neutrinos in mu(+/-)mu(+/-) + jets and e(+/-)e(+/-) + jets events in pp collisions at root s=7 TeV**  
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- CMXVII. **Measurement of the Pseudorapidity and Centrality Dependence of the Transverse Energy Density in**

**Pb-Pb Collisions at  $\sqrt{s(NN)}=2.76$  TeV**

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**CMXVIII. Search for New Physics in the Multijet and Missing Transverse Momentum Final State in Proton-Proton Collisions at  $\sqrt{s}=7$  TeV**

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**CMXIX. Search for charge-asymmetric production of  $W^+$  bosons in  $t(\bar{t})$  plus jet events from pp collisions at  $\sqrt{s}=7$  TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.

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**CMXX. Inclusive and differential measurements of the  $t(\bar{t})$  charge asymmetry in proton-proton collisions  $\sqrt{s}=7$  TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroo J., Fabjan C., et al.

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**CMXXI. Search for a  $W^+$  or Techni-rho Decaying into  $WZ$  in pp Collisions at  $\sqrt{s}=7$  TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroo J., Fabjan C., et al.

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**CMXXII. Performance of CMS muon reconstruction in pp collision events at  $\sqrt{s} = 7$  TeV**

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

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**CMXXIV. Measurement of the underlying event activity in pp collisions at  $\sqrt{s}=0.9$  and 7 TeV with the novel jet-area/median approach**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.

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**CMXXV. Search for new physics in events with same-sign dileptons and b-tagged jets in pp collisions at  $\sqrt{s}=7$  TeV**

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**CMXXVI. Measurement of the underlying event in the Drell-Yan process in proton-proton collisions at  $\sqrt{s}=7$  TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.

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**CMXXVII. Search for a Light Pseudoscalar Higgs Boson in the Dimuon Decay Channel in pp Collisions at  $\sqrt{s}=7$  TeV**

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- CMXXVIII. **Search for heavy, top-like quark pair production in the dilepton final state in pp collisions at  $\sqrt{s}=7$  TeV**  
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Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
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- CMXXXII. **Search for New Physics with Same-Sign Isolated Dilepton Events with Jets and Missing Transverse Energy**  
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- CMXXXIII. **Search for narrow resonances in dilepton mass spectra in pp collisions at root s=7 TeV CMS Collaboration**  
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- CMXXXV. **Azimuthal Anisotropy of Charged Particles at High Transverse Momenta in Pb-Pb Collisions at root S-NN=2.76 TeV**  
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- CMLVI. **Measurement of jet fragmentation into charged particles in pp and PbPb collisions at root s(NN)=2.76 TeV**  
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- CMLVII. **Measurement of the mass difference between top and antitop quarks**  
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- CMLVIII. **Search for exclusive or semi-exclusive gamma gamma production and observation of exclusive and semi-exclusive e(+)e(-) production in pp collisions at root s=7 TeV**  
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- CMLIX. **Measurement of the t(t)over-bar production cross section in the dilepton channel in pp collisions at root s=7 TeV**  
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- CMLX. **Search for a Higgs boson in the decay channel H -> ZZ((\*)) -> q(q)over-barl(-)l(+) in pp collisions at root s=7 TeV**  
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- CMLXI. **Measurement of the cross section for production of b(b)over-barX decaying to muons in pp**

**collisions at root s=7TeV**

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JOURNAL OF HIGH ENERGY PHYSICS, vol.2012, no.6, 2012 (SCI-Expanded)

**CMLXII. Search for  $B\text{-}S(0) \rightarrow \mu^{+}\mu^{-}$  and  $B\text{-}0 \rightarrow \mu^{+}\mu^{-}$  decays**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

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**CMLXIII. Measurement of the single-top-quark t-channel cross section in pp collisions at root s=7 TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2012, no.12, 2012 (SCI-Expanded)

**CMLXIV. Observation of Z decays to four leptons with the CMS detector at the LHC**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.

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**CMLXV. Measurement of energy flow at large pseudorapidities in pp collisions at root s=0.9 and 7 TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

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**CMLXVI. Measurement of the underlying event activity at the LHC with root s=7 TeV and comparison with root s=0.9 TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

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**CMLXVII. Measurement of the weak mixing angle with the Drell-Yan process in proton-proton collisions at the LHC**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

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**CMLXVIII. Search for supersymmetry in pp collisions at root s=7 TeV in events with a single lepton, jets, and missing transverse momentum**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

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**CMLXIX. Measurement of the inclusive W and Z production cross sections in pp collisions at  $\sqrt{s} = 7$  TeV with the CMS experiment**

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.

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**CMLXX. Measurement of the  $t(\bar{t})$  production cross section in pp collisions at 7 TeV in lepton plus jets events using b-quark jet identification**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

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**CMLXXI. Search for Supersymmetry at the LHC in Events with Jets and Missing Transverse Energy**

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**CMLXXII. Search for  $B\text{-}s(0) \rightarrow \mu^{+}\mu^{-}$  and  $B\text{-}0 \rightarrow \mu^{+}\mu^{-}$  Decays in pp Collisions at root s=7 TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C.,

- Friedl M., et al.  
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- CMLXXIII. **Search for New Physics with a Monojet and Missing Transverse Energy in pp Collisions at root s=7 TeV**  
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- CMLXXIV. **Determination of jet energy calibration and transverse momentum resolution in CMS**  
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- CMLXXVI. **Search for physics beyond the standard model using multilepton signatures in pp collisions at root s=7 TeV**  
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- CMLXXVII. **Search for resonances in the dijet mass spectrum from 7 TeV pp collisions at CMS**  
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- CMLXXXI. **Measurement of the t(t)over-bar production cross section in pp collisions at root s=7 TeV using the kinematic properties of events with leptons and jets**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
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- CMLXXXIII. **Observation and studies of jet quenching in PbPb collisions at sqrt(sNN)=2.76 TeV**  
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- CMXCV. **Search for Pair Production of First-Generation Scalar Leptoquarks in pp Collisions at root s=7 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., Fruehwirth R., et al.  
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- CMXCVI. **Study of Z Boson Production in PbPb Collisions at root s(NN)=2.76 TeV**

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CMXCVII. **Search for Supersymmetry in pp Collisions at root s=7 TeV in Events with Two Photons and Missing Transverse Energy**

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CMXCVIII. **Measurement of  $W+W^-$  production and search for the Higgs boson in pp collisions at root s=7 TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.

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CMXCIX. **Search for Pair Production of Second-Generation Scalar Leptoquarks in pp Collisions at root s=7 TeV**

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M. **Measurement of Dijet Angular Distributions and Search for Quark Compositeness in pp Collisions at root s=7 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Fabjan C., Friedl M., Fruehwirth R., Ghete V. M., et al.

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MI. **Search for supersymmetry in pp collisions at 7 TeV in events with jets and missing transverse energy**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., Fruehwirth R., et al.

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MII. **Prompt and non-prompt  $J/\psi$  production in pp collisions at root s=7 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., Fruehwirth R., et al.

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MIII. **Search for a heavy gauge boson  $W'$  in the final state with an electron and large missing transverse energy in pp collisions at root s=7 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., Fruehwirth R., et al.

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MIV. **Search for microscopic black hole signatures at the Large Hadron Collider**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., Fruehwirth R., et al.

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MV. **Measurement of the  $B^+$  Production Cross Section in pp Collisions at root s=7 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., Fruehwirth R., et al.

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MVI. **Dijet Azimuthal Decorrelations in pp Collisions at root s=7 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., Fruehwirth R., et al.

PHYSICAL REVIEW LETTERS, vol.106, no.12, 2011 (SCI-Expanded)

MVII. **Measurement of the Isolated Prompt Photon Production Cross Section in pp Collisions at root s=7 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M.,

- Fruehwirth R., et al.  
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- MVIII. **Search for supersymmetry in events with a lepton, a photon, and large missing transverse energy in pp collisions at root s=7 TeV**  
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- MIX. **Measurement of the Drell-Yan cross section in pp collisions at root s=7 TeV**  
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- MX. **Search for light resonances decaying into pairs of muons as a signal of new physics**  
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- MXIII. **Measurement of the inclusive Z cross section via decays to tau pairs in pp collisions at root s=7 TeV**  
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- MXIV. **Measurements of inclusive W and Z cross sections in pp collisions at root s=7 TeV**  
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- MXV. **Charged particle transverse momentum spectra in pp collisions at root s=0.9 and 7 TeV**  
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- MXVI. **Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy at the LHC**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
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- MXVII. **Measurement of the lepton charge asymmetry in inclusive W production in pp collisions at root s=7TeV**  
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- MXVIII. **First measurement of the cross section for top-quark pair production in proton-proton collisions at root s=7 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., Fruehwirth R., et al.  
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- MXIX. **Long-range and short-range dihadron angular correlations in central PbPb collisions at root**



**$s(\text{NN})=2.76$  TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

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**MXX. Search for physics beyond the standard model in opposite-sign dilepton events in pp collisions at  $\sqrt{s}=7$  TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

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**MXXI. Measurement of the  $t(\bar{t})$  production cross section and the top quark mass in the dilepton channel in pp collisions at  $\sqrt{s}=7$  TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

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**MXXII. Search for heavy stable charged particles in pp collisions at  $\sqrt{s}=7$  TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., Fruehwirth R., et al.

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**MXXIII. Search for new physics with jets and missing transverse momentum in pp collisions at  $\sqrt{s}=7$  TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

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**MXXIV. Strange particle production in pp collisions at  $\sqrt{s}=0.9$  and 7 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., Fruehwirth R., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2011, no.5, 2011 (SCI-Expanded)

**MXXV. Search for resonances in the dilepton mass distribution in pp collisions at  $\sqrt{s}=7$  TeV**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2011, no.5, 2011 (SCI-Expanded)

**MXXVI. Search for same-sign top-quark pair production at  $\sqrt{s}=7$  TeV and limits on flavour changing neutral currents in the top sector**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

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**MXXVII. Search for large extra dimensions in the diphoton final state at the Large Hadron Collider**

Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2011, no.5, 2011 (SCI-Expanded)

**MXXVIII. Charged particle multiplicities in pp interactions at  $\sqrt{s}=0.9, 2.36,$  and 7 TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., Fruehwirth R., et al.

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**MXXIX. Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at  $\sqrt{s(\text{NN})}=2.76$  TeV**

Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., Fruehwirth R., Ghete V. M., et al.

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**MXXX. Search for Quark Compositeness with the Dijet Centrality Ratio in pp Collisions at  $\sqrt{s}=7$  TeV**

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., Fruehwirth R., et al.

- PHYSICAL REVIEW LETTERS, vol.105, no.26, 2010 (SCI-Expanded)
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- MLXVII. **CMS physics technical design report, volume II: Physics performance**

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## Articles Published in Other Journals

- I. **A case of granulomatosis of polyangiitis presenting with COVID-19 infection: False-positivity or co-existence?**  
KAYA M., GÖKCE İ., Guven S., Pul S., ALPAY H.  
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- II. **Collapsing Glomerulopathy in a Patient with a TRPC6 Mutation Presenting as Rapidly Progressive Glomerulonephritis: A Case Report and Review of the Literature**  
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Saudi Journal of Kidney Diseases and Transplantation, vol.34, no.3, pp.254-258, 2023 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Kozmik Müonların Akı ölçümü**  
KAYA M., Atakişi O.  
Hızlandırıcı ve Algıç fiziği çalıştay, Turkey, 31 May - 03 June 2016
- II. **Performance of the CMS jets and missing transverse energy trigger at LHC run 2**  
Nachtman J., Atakisi I. O., Dordevic M., Kaya M., Kaya O., Kirschenmann H., Zhang F.  
38th International Conference on High Energy Physics, ICHEP 2016, Illinois, United States Of America, 3 - 10 August 2016
- III. **Tests for a new concept of EAS detector for UHE neutrinos**  
Iori M., Arslan E., Denizli H., Ferrarotto F., KAYA M., Yilmaz A., Russ J.  
23rd European Cosmic Ray Symposium (ECRS) / 32nd Russian Cosmic Ray Conference, Moscow, Russia, 3 - 07 July 2012, vol.409

## Supported Projects

Kaya M., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, B Physics at CMS Detectors, quark-gluon separation and Phase II Detector upgrade studies, 2018TAEK(CERN)A5.H6.F2-18, 2018 - 2022

Kaya M., Project Supported by Higher Education Institutions, Muon Measurement at sea level with next-generation cosmic telescope, 2015 - 2018

Kaya M., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, CMS Dedektöründe Veri Keşfi, Jetler, B-Fiziği ve Birinci Faz Sonrası Dedektör Güncellemesi Çalışmaları, 2014 - 2017

Kaya M., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, CMS'de Jet Çifti ve Ağır İyon Çalışmaları, 2009TAEK(CERN)A5.H2.P1.01-1, 2009 - 2013

## Tasks In Event Organizations

Kaya M., 3rd Turkey-Iran Joint Conference on LHC Physics, Scientific Congress, İstanbul, Turkey, Haziran 2019

## Metrics

Publication: 1074

Citation (WoS): 11677

Citation (Scopus): 60618

H-Index (WoS): 38

H-Index (Scopus): 113

## Invited Talks

CERN-CMS Deneyi ve Dedektor Yenileme calismalari, Conference, 8th INTERNATIONAL CONGRESS ON ENGINEERING AND TECHNOLOGY MANAGEMENT, Turkey, December 2022

Cosmic Ray measurement, Conference, Yıldız Teknik Üniversitesi, Turkey, December 2022

CERN-CMS DENEYi, Workshop, Gazi Üniversitesi, Turkey, April 2021

Design of Forward Cerenkov Detector in the CERN CMS Experiment and Quark/Gluon Discrimination Studies, Seminar, Tekirdağ Namık Kemal Üniversitesi, Turkey, October 2019

Jet Measurements in CMS, Workshop, TAEK, Turkey, June 2018

Jet Measurements in CMS, Seminar, Helsinki University, Finland, April 2017

Cosmic Ray Measurements, Workshop, FCC Physics, Detector and Accelerator Workshop @ İstanbul Istanbul Aydın University, Turkey, March 2016

Jet Pileup Studies for 25 ns bunch crossing in High Level Triggers in CERN-CMS experiment and upgrade Studies in Forward Hadron Calorimeters, Workshop, Mimar Sinan Güzel Sanatlar Üniversitesi, Turkey, April 2015

CERN-CMS Inclusive Jet cross-section Results , Workshop, İzmir Yüksek Teknoloji Enstitüsü, Turkey, September 2013

## Scholarships

Tauwer projesi için Araştırma Bursu, University, 2005 - 2005

Oğretim Üyesi Yetistirme, YOK, 1993 - 1999

## Awards

Kaya M., En yüksek H-index, Marmara Univ. Fen Edebiyat Fakültesi, October 2014