

## Prof. AYSEL KAYIŞ TOPAKSU

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Publons / Web Of Science ResearcherID: B-8910-2018

ScopusID: 6603006083

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### Education Information

Masters (Non-Thesis, Evening Education), Cukurova University, İktisadi Ve İdari Bilimler Fakültesi, Yönetim Ve Organizasyon, Turkey 2016 - 2017

Undergraduate, Anadolu University, Open Education Faculty, İşletme , Turkey 2013 - 2016

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Fizik, Turkey 1995 - 1999

Postgraduate, Cukurova University, Fen Bilimleri, Fizik, Turkey 1992 - 1995

Undergraduate, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, Turkey 1989 - 1992

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Education Management and Planning, European Research Conference on Frontiers in Particle Astrophysics and Cosmology, Munich, 2001

Education Management and Planning, NATO ASI 2000 Recent Developments in Particle Physics and Cosmology, NATO-ASI, 2000

Education Management and Planning, 27. ITEP Winter School of Physics, ITEP (Institute for Theoretical and Experimental Physics), 1999

Education Management and Planning, Techniques and Concept of High Energy Physics, School -A.B.D Virgin Islands, 1998

Education Management and Planning, European School of High Energy Physics, CERN-JINR, 1996

Education Management and Planning, CERN Summer Student Programme, CERN PH Department, 1993

### Dissertations

Doctorate, A Study On Increasing the Sensitivity of the CHORUS Neutrino Detector, Cukurova University, Fen Bilimleri, Yüksek Enerji Ve Plazma, 1999

Postgraduate, CHORUS Nötrino Osilasyon Deneyinde Kullanılan Muon Spektrometresinin Simülasyonu, Cukurova University, Fen Bilimleri, Fizik, 1995

## Research Areas

Physics, Nuclear physics, Basic Particles and Areas, Natural Sciences

## Academic Titles / Tasks

Professor, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, 2008 - Continues

Associate Professor, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, 2003 - 2008

Research Assistant PhD, --Seçiniz--, İsviçre, Cern ( European Organization For Nuclear Research, Research Fellow), Ph Dep., 2003 - 2005

Assistant Professor, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, 2000 - 2003

## Academic and Administrative Experience

Cukurova University, 2013 - Continues

## Courses

Parçacık Fiziği, Undergraduate, 2016 - 2017

Analiz, Undergraduate, 2013 - 2014

## Advising Theses

KAYIŞ TOPAKSU A., Classical jet shape measurements in proton-proton collisions at CMS experiment / CMS deneyinde 7x7 TeV'lik proton-proton çarpışmasında jet şekillerinin araştırılması, Doctorate, K.Özdemir(Student), 2014

KAYIŞ TOPAKSU A., Momentum scale calibration of muon momentum tracks using the muon pairs from J/psi decays and installation and commissioning work in CMS at CERN, Doctorate, G.Gökbulut(Student), 2014

KAYIŞ TOPAKSU A., Search For Extra Dimensions with Mono-jet Final States in CMS Proton Collisions at 7 TeV, Doctorate, L.Nükhet(Student), 2011

KAYIŞ TOPAKSU A., Extra GAuge Bosons in E6 Models, Doctorate, H.Arslan(Student), 2008

## Jury Memberships

Associate Professor Exam, Doçentlik Sınav Jürisi, ÜAK, February, 2013

Associate Professor Exam, Doçentlik Sınav Jürisi, ÜAK, June, 2012

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

- Measurement of Energy Correlators inside Jets and Determination of the Strong Coupling Formula Presented**

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

Hussain P., Jeitler M., et al.

Physical Review Letters, vol.133, no.7, 2024 (SCI-Expanded)

- II. **Decoherence in neutrino oscillation at the ESSnuSB experiment**  
Aguilar J., Anastasopoulos M., Baussan E., Bhattacharyya A., Bignami A., Blennow M., Bogomilov M., Bolling B., Bouquerel E., Bramati F., et al.  
Journal of High Energy Physics, vol.2024, no.8, 2024 (SCI-Expanded)
- III. **Measurement of multijet azimuthal correlations and determination of the strong coupling in proton-proton collisions at  $s=13\text{TeV}$**   
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
European Physical Journal C, vol.84, no.8, 2024 (SCI-Expanded)
- IV. **Evidence for  $tWZ$  production in proton-proton collisions at  $s=13\text{ TeV}$  in multilepton final states**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.855, 2024 (SCI-Expanded)
- V. **Constraints on anomalous Higgs boson couplings from its production and decay using the  $WW$  channel in proton-proton collisions at  $s=13\text{TeV}$**   
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
European Physical Journal C, vol.84, no.8, 2024 (SCI-Expanded)
- VI. **Observation of the Formula Presented Meson and Suppression of Formula Presented States in Pb-Pb Collisions at Formula Presented**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.  
Physical Review Letters, vol.133, no.2, 2024 (SCI-Expanded)
- VII. **Search for Narrow Trijet Resonances in Proton-Proton Collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.  
Physical Review Letters, vol.133, no.1, 2024 (SCI-Expanded)
- VIII. **Search for dark QCD with emerging jets in proton-proton collisions at  $s = 13\text{ TeV}$**   
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Journal of High Energy Physics, vol.2024, no.7, 2024 (SCI-Expanded)
- IX. **Search for a scalar or pseudoscalar dilepton resonance produced in association with a massive vector boson or top quark-antiquark  $ff$  pair in multilepton events at  $\sqrt{s}=13\text{ TeV}$**   
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.  
Physical Review D, vol.110, no.1, 2024 (SCI-Expanded)
- X. **Search for long-lived heavy neutral leptons decaying in the CMS muon detectors in proton-proton collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Physical Review D, vol.110, no.1, 2024 (SCI-Expanded)
- XI. **Observation of the Formula Presented decay and studies of the Formula Presented baryon in proton-proton collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Physical Review D, vol.110, no.1, 2024 (SCI-Expanded)
- XII. **Search for  $ZZ$  and  $ZH$  production in the  $b\bar{b}b\bar{b}$  final state using proton-proton collisions at  $s=13\text{TeV}$**   
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.

European Physical Journal C, vol.84, no.7, 2024 (SCI-Expanded)

- XIII. **Extracting the speed of sound in quark-gluon plasma with ultrarelativistic lead-lead collisions at the LHC**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Reports on Progress in Physics, vol.87, no.7, 2024 (SCI-Expanded)
- XIV. **Search for high-mass exclusive diphoton production with tagged protons in proton-proton collisions at Formula Presented**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.  
Physical Review D, vol.110, no.1, 2024 (SCI-Expanded)
- XV. **Combination of Measurements of the Top Quark Mass from Data Collected by the ATLAS and CMS Experiments at  $\sqrt{s}=7$  and 8 TeV**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Physical Review Letters, vol.132, no.26, 2024 (SCI-Expanded)
- XVI. **Search for Baryon Number Violation in Top Quark Production and Decay Using Proton-Proton Collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Physical Review Letters, vol.132, no.24, 2024 (SCI-Expanded)
- XVII. **Observation of the Formula Presented decay in proton-proton collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XVIII. **Search for stealth supersymmetry in final states with two photons, jets, and low missing transverse momentum in proton-proton collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Hussain P., et al.  
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XIX. **Search for pair production of scalar and vector leptoquarks decaying to muons and bottom quarks in proton-proton collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XX. **Search for long-lived particles using displaced vertices and missing transverse momentum in proton-proton collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XXI. **Study of nonstandard interactions mediated by a scalar field at the ESSnuSB experiment**  
Aguilar J., Anastasopoulos M., Baussan E., Bhattacharyya A., Bignami A., Blennow M., Bogomilov M., Bolling B., Bouquerel E., Bramati F., et al.  
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XXII. **Combined search for electroweak production of winos, binos, higgsinos, and sleptons in proton-proton collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.  
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XXIII. **Search for the lepton flavor violating  $\tau \rightarrow 3\mu$  decay in proton-proton collisions at  $s=13$ TeV**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M.,

- Hussain P., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.853, 2024 (SCI-Expanded)
- XXIV. **Nonresonant central exclusive production of charged-hadron pairs in proton-proton collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XXV. **Search for exotic decays of the Higgs boson to a pair of pseudoscalars in the  $\mu\mu b\bar{b}$  and  $\tau\tau b\bar{b}$  final states**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Hussain P., et al.  
European Physical Journal C, vol.84, no.5, 2024 (SCI-Expanded)
- XXVI. **Measurement of simplified template cross sections of the Higgs boson produced in association with w or z bosons in the Formula Presented decay channel in proton-proton collisions at Formula Presented**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.  
Physical Review D, vol.109, no.9, 2024 (SCI-Expanded)
- XXVII. **Search for an exotic decay of the Higgs boson into a Z boson and a pseudoscalar particle in proton-proton collisions at  $s=13\text{TeV}$**   
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.852, 2024 (SCI-Expanded)
- XXVIII. **Development of the CMS detector for the CERN LHC Run 3**  
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Hussain P., Jeitler M., et al.  
Journal of Instrumentation, vol.19, no.5, 2024 (SCI-Expanded)
- XXIX. **Timing performance of the CMS High Granularity Calorimeter prototype**  
Acar B., Adamov G., Adloff C., Afanasiev S., Akchurin N., Akgün B., Khan F., Alhusseini M., Alison J., Alpana A., et al.  
Journal of Instrumentation, vol.19, no.4, 2024 (SCI-Expanded)
- XXX. **Search for flavor changing neutral current interactions of the top quark in final states with a photon and additional jets in proton-proton collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.  
Physical Review D, vol.109, no.7, 2024 (SCI-Expanded)
- XXXI. **Search for supersymmetry in final states with disappearing tracks in proton-proton collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.  
Physical Review D, vol.109, no.7, 2024 (SCI-Expanded)
- XXXII. **New Structures in the Formula Presented Mass Spectrum in Proton-Proton Collisions at Formula Presented**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.  
Physical Review Letters, vol.132, no.11, 2024 (SCI-Expanded)
- XXXIII. **Study of azimuthal anisotropy of  $\Upsilon(1S)$  mesons in pPb collisions at  $s_{NN} = 8.16 \text{ TeV}$**   
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.850, 2024 (SCI-Expanded)
- XXXIV. **Measurements of azimuthal anisotropy of nonprompt  $D^0$  mesons 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.850, 2024 (SCI-Expanded)
- XXXV. **Search for new Higgs bosons via same-sign top quark pair production in association with a jet in proton-proton collisions at  $s=13\text{TeV}$**   
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.850, 2024 (SCI-Expanded)
- XXXVI. **Search for dark matter particles in  $W+W-$  events with transverse momentum imbalance in proton-proton collisions at  $s = 13 \text{ TeV}$**   
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.  
Journal of High Energy Physics, vol.2024, no.3, 2024 (SCI-Expanded)
- XXXVII. **Search for Scalar Leptoquarks Produced via  $\tau$ -Lepton-Quark Scattering in pp Collisions at  $\sqrt{s}=13 \text{ TeV}$**   
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.  
Physical review letters, vol.132, no.6, pp.61801, 2024 (SCI-Expanded)
- XXXVIII. **Higher-order moments of the elliptic flow distribution 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.  
Journal of High Energy Physics, vol.2024, no.2, 2024 (SCI-Expanded)
- XXXIX. **Muon identification using multivariate techniques in the CMS experiment in proton-proton collisions at  $\sqrt{S} = 13 \text{ TeV}$**   
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.  
Journal of Instrumentation, vol.19, no.2, 2024 (SCI-Expanded)
- XL. **Two-particle Bose-Einstein correlations and their Lévy parameters in PbPb collisions at Formula Presented  $\text{TeV}$**   
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.  
Physical Review C, vol.109, no.2, 2024 (SCI-Expanded)
- XLI. **Search for Inelastic Dark Matter in Events with Two Displaced Muons and Missing Transverse Momentum in Proton-Proton Collisions at  $\sqrt{s}=13 \text{ TeV}$**   
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., et al.  
Physical Review Letters, vol.132, no.4, 2024 (SCI-Expanded)
- XLII. **Evidence for the Higgs Boson Decay to a Z Boson and a Photon at the LHC**  
Aad G., Abbott B., Abeling K., Abicht N., Abidi S., Aboulhorma A., Abramowicz H., Abreu H., Abulaiti Y., Acharya B., et al.  
Physical review letters, vol.132, no.2, pp.21803, 2024 (SCI-Expanded)
- XLIII. **Study of charm hadronization with prompt  $\Lambda_c^+$  baryons in proton-proton and lead-lead 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.  
Journal of High Energy Physics, vol.2024, no.1, 2024 (SCI-Expanded)
- XLIV. **Measurement of the production cross section for a W boson in association with a charm quark in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$**   
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Hussain P., Jeitler M., et al.  
European Physical Journal C, vol.84, no.1, 2024 (SCI-Expanded)
- XLV. **Measurement of the  $\tau$  lepton polarization in Z boson decays in proton-proton collisions at (Formula**

presented.)

Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.

Journal of High Energy Physics, vol.2024, no.1, 2024 (SCI-Expanded)

- XLVI. **Luminosity determination using Z boson production at the CMS experiment**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Hussain P., et al.  
European Physical Journal C, vol.84, no.1, 2024 (SCI-Expanded)
- XLVII. **Observation of triple J/psi meson production in proton-proton collisions**  
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.  
NATURE PHYSICS, 2023 (SCI-Expanded)
- XLVIII. **Search for new particles in an extended Higgs sector with four b quarks in the 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., Fruhwirth R., Jeitler M., et al.  
PHYSICS LETTERS B, vol.835, 2022 (SCI-Expanded)
- XLIX. **Nuclear modification of Y states in pPb collisions at root S-NN=5.02 TeV**  
Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.  
PHYSICS LETTERS B, vol.835, 2022 (SCI-Expanded)
- L. **The European Spallation Source neutrino super-beam conceptual design report**  
Alekou A., Baussan E., Bhattacharyya A. K., Kraljevic N. B., Blennow M., Bogomilov M., Bolling B., Bouquerel E., Buchan O., Burgman A., et al.  
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS, vol.231, no.21, pp.3779-3955, 2022 (SCI-Expanded)
- LI. **Evidence for WW/WZ vector boson scattering in the decay channel l nu qq produced in association with two jets in proton-proton collisions at root s=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.  
PHYSICS LETTERS B, vol.834, 2022 (SCI-Expanded)
- LII. **Measurement of the Higgs boson width and evidence of its off-shell contributions to ZZ production**  
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.  
NATURE PHYSICS, vol.18, no.11, 2022 (SCI-Expanded)
- LIII. **Search for a W' boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state 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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.9, 2022 (SCI-Expanded)
- LIV. **Search for high-mass resonances decaying to a jet and a Lorentz-boosted resonance 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.  
PHYSICS LETTERS B, vol.832, 2022 (SCI-Expanded)
- LV. **Search for Higgs Boson Pair Production in the Four b Quark Final State 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 LETTERS, vol.129, no.8, 2022 (SCI-Expanded)
- LVI. **Search for long-lived heavy neutral leptons with displaced vertices 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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2022 (SCI-Expanded)
- LVII. **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  $\sqrt{s}=13$  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.  
PHYSICAL REVIEW LETTERS, vol.129, no.3, 2022 (SCI-Expanded)
- LVIII. **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. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.  
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- LIX. **Identification of hadronic tau lepton decays using a deep neural network**  
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- CXXIII. **Measurement of differential  $t(\bar{t})$  over-bar production cross sections using top quarks at large transverse momenta in pp collisions at root  $s=13$  TeV**  
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- CXXIV. **Studies of charm and beauty hadron long-range correlations in pp and pPb collisions at LHC energies**  
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- CXXVIII. **Measurements of production cross sections of polarized same-sign W boson pairs in association with two jets in proton-proton collisions at root  $s=13$  TeV**  
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- CXXXIX. **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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- CXLI. **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**  
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- CXLIV. **Reconstruction of signal amplitudes in the CMS electromagnetic calorimeter in the presence of overlapping proton-proton interactions**

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- CXLVI. **Observation of the Production of Three Massive Gauge Bosons at  $\sqrt{s}=13$  TeV**

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- CXLVII. **Pileup mitigation at CMS in 13 TeV data**

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- CXLVIII. **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**

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- CXLIX. **Search for supersymmetry in proton-proton collisions at  $\sqrt{s}=13$  TeV in events with high-momentum Z bosons and missing transverse momentum**

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- CL. **Measurement of CKM matrix elements in single top quark t-channel production in proton-proton collisions at  $\sqrt{s}=13$  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.

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- CLI. **Studies of Charm Quark Diffusion inside Jets Using Pb-Pb and pp Collisions at  $\sqrt{s(NN)}=5.02$  TeV**

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- CLII. **Measurements of  $t\bar{t}$  Production and the CP Structure of the Yukawa Interaction between the Higgs Boson and Top Quark in the Diphoton Decay Channel**

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- CLIII. **Combination of the W boson polarization measurements in top quark decays using ATLAS and CMS data at  $\sqrt{s}=8$  TeV**

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- CLIV. **Measurement of the associated production of a Z boson with charm or bottom quark jets in proton-proton collisions at  $\sqrt{s}=13$  TeV**

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- CLV. **Search for resonant pair production of Higgs bosons in the  $bbZZ$  channel in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CLVI. **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**  
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- CLVII. **Measurement of  $t(\bar{t})$  normalised multi-differential cross sections in pp collisions at  $\sqrt{s}=13$  TeV, and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions**  
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- CLVIII. **Search for charged Higgs bosons decaying into a top and a bottom quark in the all-jet final state of pp collisions at  $\sqrt{s}=13$  TeV**  
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- CLIX. **Measurement of the cross section for  $t(\bar{t})$  production with additional jets and b jets in pp collisions at  $\sqrt{s}=13$  TeV**  
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- CLX. **The production of isolated photons in PbPb and pp collisions at  $\sqrt{s(NN)}=5.02$  TeV**  
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- CLXI. **Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV**  
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- CLXII. **Search for disappearing tracks in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CLXIII. **Measurement of the cross section for electroweak production of a Z boson, a photon and two jets in proton-proton collisions at  $\sqrt{s}=13$  TeV and constraints on anomalous quartic couplings**  
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- CLXIV. **A measurement of the Higgs boson mass in the diphoton decay channel**  
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- CLXV. **Search for dijet resonances using events with three jets in proton-proton collisions at  $\sqrt{s}=13$**

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

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

- CLXVII. **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, no.6, 2020 (SCI-Expanded)

- CLXVIII. **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., Eroe J., Del Valle A. E., et al.

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

- CLXIX. **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)

- CLXX. **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., Eroe J., Del Valle A. E., et al.

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

- CLXXI. **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, no.5, 2020 (SCI-Expanded)

- CLXXII. **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**

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JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2020 (SCI-Expanded)

- CLXXIII. **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.

JOURNAL OF INSTRUMENTATION, vol.15, no.5, 2020 (SCI-Expanded)

- CLXXIV. **Measurement of differential cross sections and charge ratios for t-channel single top quark production in proton-proton collisions at mml:msqrts mml:msqrt=13 mml:mospace width="0.166667em"mml:mospaceTe mml:mospace width="0.333333em"mml:mospace**

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.5, 2020 (SCI-Expanded)

- CLXXV. **Running of the top quark mass from proton-proton collisions at root s=13 TeV**

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PHYSICS LETTERS B, vol.803, 2020 (SCI-Expanded)

- CLXXVI. **Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at root s=13 TeV**  
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- CLXXVII. **Constraints on the  $\chi(c1)$  versus  $\chi(c2)$  Polarizations in Proton-Proton Collisions at root s=8 TeV**  
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- CLXXVIII. **Measurement of the  $t(\bar{t})$  versus  $b(\bar{b})$  production cross section in the all-jet final state 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.  
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- CLXXIX. **Measurement of properties of  $B(s)(0)s \rightarrow \mu(+)\mu(-)$  decays and search for  $B-0 \rightarrow \mu(+)\mu(-)$  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.  
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- CLXXX. **Experimental study of different silicon sensor options for the upgrade of the CMS Outer Tracker**  
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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- CLXXXI. **Production of  $\Lambda(+)(c)$  baryons in proton-proton and lead-lead collisions at root S-NN=5.02 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.803, 2020 (SCI-Expanded)
- CLXXXII. **Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at root s=13 TeV**  
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- CLXXXIII. **Study of excited  $\Lambda(0)(b)$  states decaying to  $\Lambda(0)(b)\pi(+)\pi(-)$  in proton-proton collisions at root s=13 TeV**  
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- CLXXXIV. **Search for new neutral Higgs bosons through the  $H \rightarrow ZA \rightarrow l^+l^-bb$  process in pp collisions at  $\sqrt{s}=13$  TeV**  
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- CLXXXV. **Measurement of top quark pair production in association with a Z boson in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CLXXXVI. **Observation of the  $\Lambda(0)(b) \rightarrow J/\psi \Lambda \phi$  decay 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.802, 2020 (SCI-Expanded)

CLXXXVII. **Bose-Einstein correlations of charged hadrons 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, no.3, 2020 (SCI-Expanded)

:LXXXVIII. **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.

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

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CXC. **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)

CXCI. **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, no.3, 2020 (SCI-Expanded)

CXCII. **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, no.3, 2020 (SCI-Expanded)

CXCIII. **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, no.2, 2020 (SCI-Expanded)

CXCIV. **Combined search for supersymmetry with photons 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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CXCV. **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**

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CXCVI. **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)

- CXCVII. **Search for production of four top quarks in final states with same-sign or multiple 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.  
EUROPEAN PHYSICAL JOURNAL C, vol.80, no.2, 2020 (SCI-Expanded)
- CXCVIII. **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)
- CXCIX. **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)
- CC. **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)
- CCI. **Measurement of the single top quark and antiquark production cross sections in the t channel and their ratio in proton-proton collisions at root s=13 TeV**  
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PHYSICS LETTERS B, vol.800, 2020 (SCI-Expanded)
- CCII. **Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements**  
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- CCIII. **Search for a charged Higgs boson decaying into top and bottom quarks in events with electrons or muons in proton-proton collisions at root s=13TeV**  
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- CCIV. **Evidence for WW production from double-parton interactions in proton-proton collisions at root s=13 TeV**  
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- CCV. **Measurements of differential Z boson production cross sections in proton-proton collisions at root s=13 TeV**  
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- CCVI. **Probing the chiral magnetic wave in pPb and PbPb collisions at root 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.  
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- CCVII. **Search for Low-Mass Quark-Antiquark Resonances Produced in Association with a Photon 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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**CCVIII. Constraints on anomalous HVV couplings from the production of Higgs bosons decaying to tau lepton pairs**

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.11, 2019 (SCI-Expanded)

**CCIX. Measurement of the differential Drell-Yan cross section 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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**CCX. Study of the  $B^+ \rightarrow J/\psi(\Lambda_b)$  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.

JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2019 (SCI-Expanded)

**CCXI. Search for anomalous triple gauge couplings in WW and WZ production in lepton plus jet 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., Dragicevic M., Eroe J., Del Valle A. E., et al.

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**CCXII. Search for long-lived particles using delayed photons 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 D, vol.100, no.11, 2019 (SCI-Expanded)

**CCXIII. 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)

**CCXIV. 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.

PHYSICAL REVIEW LETTERS, vol.123, no.24, 2019 (SCI-Expanded)

**CCXV. 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)

**CCXVI. 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)

**CCXVII. 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.

JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2019 (SCI-Expanded)

**CCXVIII. Search for new physics in top quark production in dilepton 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., Eroe J., Del Valle A. E., et al.

- EUROPEAN PHYSICAL JOURNAL C, vol.79, no.11, 2019 (SCI-Expanded)
- CCXXIX. **Search for the production of four top quarks in the single -lepton and opposite -sign dilepton final states 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.  
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- CCXX. **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)
- CCXXI. **Measurement of the top quark Yukawa coupling from  $t(\bar{t})$  kinematic distributions in the lepton plus jets 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., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICAL REVIEW D, vol.100, no.7, 2019 (SCI-Expanded)
- CCXXII. **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, no.10, 2019 (SCI-Expanded)
- CCXXIII. **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)
- CCXXIV. **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)
- CCXXV. **Measurement of  $B\text{-}s(0)$  meson production in pp and PbPb collisions at  $\sqrt{s\text{-}NN}=5.02$  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)
- CCXXVI. **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.  
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- CCXXVII. **Search for charged Higgs bosons in the  $H\text{-}+/- \rightarrow \tau(+/-)\nu(\tau)$  decay channel in proton-proton collisions at  $s=13$  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, no.7, 2019 (SCI-Expanded)
- CCXXVIII. **Search for the associated production of the Higgs boson and a vector boson in proton-proton collisions at=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, no.6, 2019 (SCI-Expanded)
- CCXXIX. **Measurements of the Higgs boson width and anomalous HVV couplings from on-shell and off-shell production in the four-lepton 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.  
PHYSICAL REVIEW D, vol.99, no.11, 2019 (SCI-Expanded)
- CCXXX. **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)
- CCXXXI. **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)
- CCXXXII. **Search for a low-mass tau(-)tau(+) resonance in association with a bottom 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., Dragicevic M., Eroe J., Escalante Del Valle A., et al.  
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- CCXXXIII. **Search for associated production of a Higgs boson and a single 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.  
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- CCXXXIV. **Combined measurements of Higgs boson couplings in proton- proton collisions at v s=13TeV**  
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.79, no.5, 2019 (SCI-Expanded)
- CCXXXV. **Combinations of single-top-quark production cross-section measurements and vertical bar f(LV)V(tb)vertical bar determinations at root s=7 and 8 TeV with the ATLAS and CMS experiments**  
Aaboud M., Aad G., Abbott B., Abbott D. C., Abdinov O., Abud A. A., Abhayasinghe D. K., Abidi S. H., AbouZeid O. S., Abraham N. L., et al.  
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- CCXXXVI. **Search for a W ' boson decaying to a tau lepton and a neutrino in proton-proton collisions at root s=13 TeV**  
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PHYSICS LETTERS B, vol.792, pp.107-131, 2019 (SCI-Expanded)
- CCXXXVII. **Measurement and interpretation of differential cross sections for Higgs boson production 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.  
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- CCXXXVIII. **Search for an L-mu - L-tau gauge boson using Z -> 4 mu 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., Dragicevic M., Ero J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.792, pp.345-368, 2019 (SCI-Expanded)
- CCXXXIX. **Measurement of the energy density as a function of pseudorapidity 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.



EUROPEAN PHYSICAL JOURNAL C, vol.79, no.5, 2019 (SCI-Expanded)

- CCXL. **Measurements of the pp WZ inclusive and differential production cross sections and constraints on charged anomalous triple gauge couplings at  $s=13$  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, no.4, 2019 (SCI-Expanded)
- CCXLI. **Search for W Boson Decays to Three Charged Pions**  
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.15, 2019 (SCI-Expanded)
- CCXLII. **Search for nonresonant Higgs boson pair production in the  $b(b)\text{-}\bar{b}(b)\text{-}\bar{b}$  final state 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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- CCXLIII. **Search for contact interactions and large extra dimensions in the dilepton mass spectra from 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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- CCXLIV. **Measurements of properties of the Higgs boson decaying to a W boson pair 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.  
PHYSICS LETTERS B, vol.791, pp.96-129, 2019 (SCI-Expanded)
- CCXLV. **Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two 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., Dragicevic M., Eroe J., Del Valle A. E., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2019 (SCI-Expanded)
- CCXLVI. **Inclusive search for supersymmetry in pp collisions at root  $s=13$  TeV using razor variables and boosted object identification in zero and one lepton final states**  
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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- CCXLVII. **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.  
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- CCXLVIII. **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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- CCXLIX. **Search for  $t(t)\text{-}\bar{b}$  production in the  $H \rightarrow b(b)\text{-}\bar{b}$  decay channel with leptonic  $t(t)\text{-}\bar{b}$  decays in proton-proton collisions at root  $s=13$  TeV**  
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JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2019 (SCI-Expanded)
- CCL. **Measurement of nuclear modification factors of  $\gamma(1S)$ ,  $\gamma(2S)$ , and  $\gamma(3S)$  mesons 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., Eroee J., et al.

PHYSICS LETTERS B, vol.790, pp.270-293, 2019 (SCI-Expanded)

- CCLI. **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., Eroee J., et al.  
PHYSICS LETTERS B, vol.790, pp.140-166, 2019 (SCI-Expanded)
- CCLII. **Search for Narrow H gamma 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., Eroee J., Del Valle A. E., et al.  
PHYSICAL REVIEW LETTERS, vol.122, no.8, 2019 (SCI-Expanded)
- CCLIII. **Measurement of prompt psi(2S) production cross sections in proton-lead and proton-proton 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., Eroee J., et al.  
PHYSICS LETTERS B, vol.790, pp.509-532, 2019 (SCI-Expanded)
- CCLIV. **Search for a heavy resonance decaying to a top quark and a vector-like top quark in the lepton plus jets 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., Eroee J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.79, 2019 (SCI-Expanded)
- CCLV. **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., Eroee J., Del Valle A. E., et al.  
PHYSICAL REVIEW LETTERS, vol.122, no.12, 2019 (SCI-Expanded)
- CCLVI. **Search for long-lived particles decaying into displaced jets in proton-proton collisions at root s=13 TeV**  
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- CCLVII. **Search for new particles decaying to a jet and an emerging jet**  
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- CCLVIII. **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., Eroee J., Del Valle A. E., et al.  
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- CCLIX. **Non-Gaussian elliptic-flow fluctuations in PbPb collisions at root S-NN=5.02 TeV**  
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- CCLX. **Measurements of t(t)-bar 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., Eroee J., Del Valle A. E., et al.  
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- CCLXI. **Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CCLXII. **Search for pair production of second-generation leptoquarks at root  $s=13$  TeV**  
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- CCLXIII. **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**  
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- CCLXIV. **Search for Dark Matter Particles Produced in Association with a Top Quark Pair at root  $s=13$  TeV**  
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- CCLXV. **Search for the Higgs Boson Decaying to Two Muons in Proton-Proton Collisions at root  $s=13$  TeV**  
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- CCLXVI. **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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- CCLXVII. **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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- CCLXVIII. **Angular analysis of the decay  $B^+ \rightarrow K^+ \mu^+ \mu^-$  in proton-proton collisions at root  $s=8$  TeV**  
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- CCLXIX. **Search for pair-produced resonances decaying to quark pairs in proton-proton collisions at root  $s=13$  TeV**  
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- CCLXX. **Search for Leptoquarks Coupled to Third-Generation Quarks 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., et al.  
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- CCLXXI. **Event shape variables measured using multijet final states in proton-proton collisions at root  $s=13$  TeV**  
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- CCLXXII. **Searches for pair production of charginos and top squarks in final states with two oppositely charged leptons in proton-proton collisions at root s=13 TeV**  
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- CCLXXIII. **Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at root s=13 TeV**  
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- CCLXXIV. **Search for resonances in the mass spectrum of muon pairs produced in association with b quark jets in proton-proton collisions at root 8 and 13 TeV**  
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- CCLXXV. **Search for a charged Higgs boson decaying to charm and bottom quarks in proton-proton collisions at root s=8TeV**  
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- CCLXXVI. **Measurement of jet substructure observables in t(t)over-bar events from 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 D, vol.98, no.9, 2018 (SCI-Expanded)
- CCLXXVII. **Evidence for the Associated Production of a Single Top Quark and a Photon 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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- CCLXXVIII. **Search for the decay of a Higgs boson in the ll gamma channel in proton-proton collisions at root s=13 TeV**  
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- CCLXXIX. **Search for supersymmetry in events with a tau lepton pair and missing transverse momentum in proton-proton collisions at root s=13TeV**  
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- CCLXXX. **Measurement of the groomed jet mass in PbPb and pp collisions at root s(NN)=5.02 TeV**  
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JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2018 (SCI-Expanded)
- CCLXXXI. **Charged-particle nuclear modification factors in XeXe collisions at root S-NN=5.44 TeV**  
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- CCLXXXII. **Measurement of the production cross section for single top quarks in association with W bosons 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., Eroo J., et al.  
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- :CLXXXIII. **Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state with two b quarks 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., Dragicevic M., Eroo J., et al.  
PHYSICS LETTERS B, vol.785, pp.462-488, 2018 (SCI-Expanded)
- :CLXXXIV. **Observation of the  $Z \rightarrow \psi l^{(+)}l^{(-)}$  Decay 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., Eroo J., et al.  
PHYSICAL REVIEW LETTERS, vol.121, no.14, 2018 (SCI-Expanded)
- CCLXXXV. **Precision measurement of the structure of the CMS inner tracking system using nuclear interactions**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
JOURNAL OF INSTRUMENTATION, vol.13, 2018 (SCI-Expanded)
- :CLXXXVI. **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., Dragicevic M., Eroo J., et al.  
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- CLXXXVII. **Observation of Higgs Boson Decay to Bottom Quarks**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A. E., et al.  
PHYSICAL REVIEW LETTERS, vol.121, no.12, 2018 (SCI-Expanded)
- :LXXXVIII. **Search for dark matter produced in association with a Higgs boson decaying to gamma gamma or tau(+)tau(-) at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A. E., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.9, 2018 (SCI-Expanded)
- :CLXXXIX. **Search for additional neutral MSSM Higgs bosons in the tau tau 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., Eroo J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.9, 2018 (SCI-Expanded)
- CCXC. **Elliptic Flow of Charm and Strange Hadrons in High-Multiplicity p plus Pb Collisions at root(NN)-N-s=8.16 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICAL REVIEW LETTERS, vol.121, no.8, 2018 (SCI-Expanded)
- CCXCI. **Search for beyond the standard model Higgs bosons decaying into a b(b)over-bar pair 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., Eroo J., et al.  
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- CCXCII. **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 root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
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- CCXCIII. **Search for R-parity violating supersymmetry in pp collisions at root s=13 TeV using b jets in a final**

**state with a single lepton, many jets, and high sum of large-radius jet masses**

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

PHYSICS LETTERS B, vol.783, pp.114-139, 2018 (SCI-Expanded)

**CCXCIV. 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., Eroee J., Del Valle A. E., et al.

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

**CCXCV. Search for disappearing tracks as a signature of new long-lived particles 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., Eroee J., et al.

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

**CCXCVI. Search for vector-like T and B quark pairs in final states with 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., Eroee J., et al.

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

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

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

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

**CCXCVIII. Observation of the  $\chi(b1)(3P)$  and  $\chi(b2)(3P)$  and Measurement of their Masses**

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.

PHYSICAL REVIEW LETTERS, vol.121, no.9, 2018 (SCI-Expanded)

**CCXCIX. 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., Eroee J., et al.

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

**CCC. Observation of proton-tagged, central (semi)exclusive production of high-mass lepton pairs in pp collisions at 13 TeV with the CMS-TOTEM precision proton spectrometer**

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

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

**CCCI. 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**

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.

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

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

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

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

**CCCIII. Nuclear modification factor of D-0 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.

PHYSICS LETTERS B, vol.782, pp.474-496, 2018 (SCI-Expanded)

- CCCIV. **Measurement of the underlying event activity in inclusive Z boson 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., Brondolin E., Dragicevic M., Eroee J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2018 (SCI-Expanded)
- CCCV. **Search for a massive resonance decaying to a pair of Higgs bosons in the four b quark 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., Eroee J., et al.  
PHYSICS LETTERS B, vol.781, pp.244-269, 2018 (SCI-Expanded)
- CCCVI. **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., Eroee J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, 2018 (SCI-Expanded)
- CCCVII. **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., Eroee J., et al.  
PHYSICAL REVIEW C, vol.97, no.6, 2018 (SCI-Expanded)
- CCCVIII. **Measurements of differential cross sections of top quark pair production as a function of kinematic event variables 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., Eroee J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2018 (SCI-Expanded)
- CCCIX. **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., Eroee J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2018 (SCI-Expanded)
- CCCX. **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.  
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- CCCXI. **Observation of (tt)over-barH Production**  
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.  
PHYSICAL REVIEW LETTERS, vol.120, no.23, 2018 (SCI-Expanded)
- CCCXII. **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 root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.  
PHYSICAL REVIEW D, vol.97, no.11, 2018 (SCI-Expanded)
- CCCXIII. **Performance of the CMS muon detector and muon reconstruction with 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., Eroee J., et al.  
JOURNAL OF INSTRUMENTATION, vol.13, 2018 (SCI-Expanded)
- CCCXIV. **Search for t(t)over-barH 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., Eroee J., et al.

- JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2018 (SCI-Expanded)
- CCCXV. **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  $\sqrt{s}=13$  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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- CCCXVI. **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, no.6, 2018 (SCI-Expanded)
- CCCXVII. **Measurement of Prompt D-0 Meson Azimuthal Anisotropy in Pb-Pb 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., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.20, 2018 (SCI-Expanded)
- CCCXVIII. **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  $\sqrt{s}=13$  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.780, pp.384-409, 2018 (SCI-Expanded)
- CCCXIX. **Evidence for the Higgs boson decay 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.  
PHYSICS LETTERS B, vol.780, pp.501-532, 2018 (SCI-Expanded)
- CCCXX. **Search for the X(5568) State Decaying into B-s(0)pi(+/-) 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.  
PHYSICAL REVIEW LETTERS, vol.120, no.20, 2018 (SCI-Expanded)
- CCCXXI. **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., Eroe J., et al.  
PHYSICAL REVIEW C, vol.97, no.4, 2018 (SCI-Expanded)
- CCCXXII. **Combination of inclusive and differential t(t)-bar charge asymmetry measurements using ATLAS and CMS data at  $\sqrt{S}=7$  and 8 TeV**  
Aaboud M. y., Aad G., Abbott B., Abidinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2018 (SCI-Expanded)
- CCCXXIII. **Observation of the Higgs boson decay to a pair of tau leptons with the CMS detector**  
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.283-316, 2018 (SCI-Expanded)
- CCCXXIV. **Suppression of Excited gamma States Relative to the Ground State in Pb-Pb Collisions at  $\sqrt{s_{NN}}=5.02$  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 LETTERS, vol.120, no.14, 2018 (SCI-Expanded)
- CCCXXV. **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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- CCCXXVI. **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)
- CCCXXVII. **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)
- CCCXXVIII. **Search for new phenomena in final states with two opposite-charge, same-flavor leptons, jets, and missing transverse momentum in pp collisions at root s=13TeV**  
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, no.3, 2018 (SCI-Expanded)
- CCCXXIX. **Search for Higgs boson pair production in events with two bottom quarks and two tau leptons 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.101-127, 2018 (SCI-Expanded)
- CCCXXX. **Measurement of the inclusive  $t(\bar{t})$  cross section in pp collisions root 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., Ero J., et al.  
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- CCCXXXI. **Comparing transverse momentum balance of b jet pairs in pp and PbPb collisions at root s(NN)=5.02 TeV**  
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- CCCXXXII. **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)
- CCCXXXIII. **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.  
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- CCCXXXIV. **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)
- CCCXXXV. **Search for heavy resonances decaying to a top quark and a bottom quark in the lepton plus jets 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., Ero J., et al.

- PHYSICS LETTERS B, vol.777, pp.39-63, 2018 (SCI-Expanded)
- CCXXXVI. **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., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2018 (SCI-Expanded)
- CCXXXVII. **Search for resonant and nonresonant Higgs boson pair production in the b(b)over-bar 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.  
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- CCXXXVIII. **Brightness and uniformity measurements of plastic scintillator tiles at the CERN H2 test beam**  
Chatrchyan S., 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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- CCXXXIX. **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)
- CCCXL. **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)
- CCCXLI. **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., Ero J., Flechl M., et al.  
PHYSICAL REVIEW D, vol.96, no.11, 2017 (SCI-Expanded)
- CCCXLII. **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., Ero J., et al.  
PHYSICAL REVIEW LETTERS, vol.119, no.22, 2017 (SCI-Expanded)
- CCCXLIII. **Search for dark matter produced in association with heavy-flavor quark pairs 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., Ero J., Flechl M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.12, 2017 (SCI-Expanded)
- CCCXLIV. **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)
- CCCXLV. **Measurement of the triple-differential dijet cross section in proton-proton collisions at root s=8 TeV and constraints on parton distribution functions**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.11, 2017 (SCI-Expanded)
- CCCXLVI. **Measurements of the associated production of a Z boson and b jets 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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- CCCXLVII. **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)
- :CCXLVIII. **Search for associated production of dark matter with a Higgs boson decaying to  $b\bar{b}$  or  $\gamma\gamma$  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, no.10, 2017 (SCI-Expanded)
- CCCXLIX. **Search for Higgs boson pair production in the  $b\bar{b}\tau\tau$  state 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., Eroe J., Flechl M., et al.  
PHYSICAL REVIEW D, vol.96, no.7, 2017 (SCI-Expanded)
- CCCL. **Search for light bosons in decays of the 125 GeV Higgs 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.  
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- CCCLI. **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**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW LETTERS, vol.119, no.15, 2017 (SCI-Expanded)
- CCCLII. **Measurement of the  $B\rightarrow\tau\nu$  Meson Nuclear Modification Factor 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., Eroe J., Flechl M., et al.  
PHYSICAL REVIEW LETTERS, vol.119, no.15, 2017 (SCI-Expanded)
- CCCLIII. **Search for Charged Higgs Bosons Produced via Vector Boson Fusion and Decaying into a Pair of W and Z Bosons Using pp 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 LETTERS, vol.119, no.14, 2017 (SCI-Expanded)
- CCCLIV. **Search for new phenomena with the M-T2 variable in the all-hadronic final state produced in proton-proton collisions at root s=13TeV**  
Sirunyan A. M., Tumasyan A., Johnson A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.10, 2017 (SCI-Expanded)
- CCCLV. **Search for heavy resonances that decay into a vector boson and a Higgs boson in hadronic final states at root s=13TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio E., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.9, 2017 (SCI-Expanded)
- CCCLVI. **Search for new phenomena with multiple charged leptons 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., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.9, 2017 (SCI-Expanded)
- CCCLVII. **Measurement of the top quark mass in the dileptonic  $t(\bar{t})$  decay channel using the mass observables  $M_{bl}$ ,  $M_{T2}$ , and  $M_{blv}$  in pp collisions at  $\sqrt{s}=8$  TeV**  
Sirunyan A. M., 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.96, no.3, 2017 (SCI-Expanded)
- CCCLVIII. **Study of Jet Quenching with Z plus jet Correlations in Pb-Pb and pp Collisions at  $\sqrt{s(NN)}=5.02$  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 LETTERS, vol.119, no.8, 2017 (SCI-Expanded)
- CCCLIX. **Search for heavy gauge  $W'$  bosons in events with an energetic lepton and large missing transverse momentum at  $\sqrt{s}=13$ TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.770, pp.278-301, 2017 (SCI-Expanded)
- CCCLX. **Measurement of the mass difference between top quark and antiquark in pp collisions at  $\sqrt{s}=8$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.770, pp.50-71, 2017 (SCI-Expanded)
- CCCLXI. **Multiplicity and rapidity dependence of strange hadron production in pp, pPb, and PbPb collisions at the LHC**  
POLATÖZ A., KAYIŞ TOPAKSU A., DUMANOĞLU İ., Collaboration C.  
PHYSICS LETTERS B, vol.768, pp.103-129, 2017 (SCI-Expanded)
- CCCLXII. **Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos, and 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.  
PHYSICS LETTERS B, vol.768, pp.137-162, 2017 (SCI-Expanded)
- CCCLXIII. **Relative Modification of Prompt  $\psi(2S)$  and  $J/\psi$  Yields from pp to PbPb Collisions at  $\sqrt{s(NN)}=5.02$  TeV**  
DUMANOĞLU İ., KAYIŞ TOPAKSU A., TUMASYAN A., Wolfgang A., Albert S.  
PHYSICAL REVIEW LETTERS, vol.118, pp.1-20, 2017 (SCI-Expanded)
- CCCLXIV. **Search for high-mass diphoton resonances in proton-proton collisions at 13 TeV and combination with 8 TeV search**  
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.767, pp.147-170, 2017 (SCI-Expanded)
- CCCLXV. **Search for electroweak production of charginos in final states with two T leptons in pp collisions at  $\sqrt{s}=8$  TeV**  
Khachtryan V., SIRUNYAN A. M., Wolfgang A., Tumasyan A., ASILAR E., BRANDSTETTER J., BERGAUER T., DUMANOĞLU İ., KAYIŞ TOPAKSU A., Collaboration C.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, pp.1-20, 2017 (SCI-Expanded)
- CCCLXVI. **Search for electroweak production of a vector-like quark decaying to a top quark and a Higgs boson using boosted topologies in fully hadronic final states**  
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, no.4, 2017 (SCI-Expanded)
- CCCLXVII. **Observation of Charge-Dependent Azimuthal Correlations in p-Pb Collisions and Its Implication for**

### **the Search for the Chiral Magnetic Effect**

Khachatryan V., Tumasyan A., SIRUNYAN A. M., Wolfgang A., Asiler E., BRANDSTETTER J., BERGAUER T., DUMANOĞLU İ., KAYIŞ TOPAKSU A., Collaboration C.

PHYSICAL REVIEW LETTERS, vol.118, no.12, pp.1-20, 2017 (SCI-Expanded)

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

Khachatryan V., SIRUNYAN A. M., Tumasyan A., Wolfgang A., Asiler E., BRANDSTETTER J., DUMANOĞLU İ., KAYIŞ TOPAKSU A., Collaboration C.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.3, pp.1-20, 2017 (SCI-Expanded)

### **CCCLXIX. Measurement of the WZ production cross section in pp collisions at $\sqrt{s}=13$ TeV**

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

PHYSICS LETTERS B, vol.766, pp.268-290, 2017 (SCI-Expanded)

### **CCCLXX. Search for lepton flavour violating decays of the Higgs boson to $e\tau$ and $e\mu$ 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.

PHYSICS LETTERS B, vol.763, pp.472-500, 2016 (SCI-Expanded)

### **CCCLXXI. Search for new physics in final states with two opposite-sign, same-flavor leptons, jets, and missing transverse momentum in pp collisions at TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2016 (SCI-Expanded)

### **CCCLXXII. 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 Haevermaet H., Van Mechelen P., Van Spilbeeck A., et al.

JOURNAL OF INSTRUMENTATION, vol.11, 2016 (SCI-Expanded)

### **:CCLXXIII. Phenomenological MSSM interpretation of CMS searches in pp collisions at $\sqrt{s}=7$ and 8 TeV**

Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Wolfgang A., Asiler E., Bergauer T., Brandstetter J., DUMANOĞLU İ., EŞKUT E., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.10, pp.1-52, 2016 (SCI-Expanded)

### **:CCLXXIV. 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., Albert S., Tumasyan A., Wolfgang A., Ece A., Bergauer T., Brandstetter J., Brondolin E., DUMANOĞLU İ., POLATÖZ A., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.9, pp.1-20, 2016 (SCI-Expanded)

### **CCCLXXV. 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., Ero J., et al.

PHYSICAL REVIEW D, vol.94, no.5, 2016 (SCI-Expanded)

### **:CCLXXVI. Azimuthal decorrelation of jets widely separated in rapidity in pp collisions at $\sqrt{s} = 7$ TeV**

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

Journal of High Energy Physics, vol.2016, no.8, 2016 (SCI-Expanded)

### **CCCLXXVII. 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)

- :CLXXVIII. **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., Eroo J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.7, 2016 (SCI-Expanded)
- :CCLXXIX. **Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at  $\sqrt{s}= 8$  TeV**  
The CMS collaboration C., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., et al.  
Journal of High Energy Physics, vol.2016, no.6, 2016 (SCI-Expanded)
- CCCLXXX. **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., Gheze V. M., et al.  
PHYSICS LETTERS B, vol.756, pp.84-102, 2016 (SCI-Expanded)
- :CCLXXXI. **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., Eroo J., et al.  
PHYSICS LETTERS B, vol.753, pp.363-388, 2016 (SCI-Expanded)
- CCLXXXII. **Search for  $W^- \rightarrow tb$  in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A., Tumasyan A., Wolfgang A., Asilar E., Bergauer T., Brondolin E., DUMANOĞLU İ., EŞKUT E., POLATÖZ A., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, pp.1-42, 2016 (SCI-Expanded)
- :CLXXXIII. **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., Eroo J., et al.  
PHYSICS LETTERS B, vol.753, pp.341-362, 2016 (SCI-Expanded)
- :CLXXXIV. **Measurement of differential cross sections for Higgs boson production in the diphoton decay channel 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., Eroo J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.1, 2016 (SCI-Expanded)
- CCLXXXV. **Pseudorapidity distribution of charged hadrons in proton-proton collisions at root s=13TeV**  
KAYIŞ TOPAKSU A., POLATÖZ A., EŞKUT E., DUMANOĞLU İ.  
PHYSICS LETTERS B, vol.751, pp.143-163, 2015 (SCI-Expanded)
- :CLXXXVI. **Search for diphoton resonances in the mass range from 150 to 850 GeV in pp collisions at root s=8 TeV**  
KAYIŞ TOPAKSU A., POLATÖZ A., EŞKUT E., DUMANOĞLU İ.  
PHYSICS LETTERS B, vol.750, pp.494-519, 2015 (SCI-Expanded)
- CLXXXVII. **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., Eroo J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2015 (SCI-Expanded)
- :LXXXVIII. **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., Eroo J., Friedl M., Fruehwirth R., Gheze V. M., et al.  
PHYSICS LETTERS B, vol.749, pp.14-34, 2015 (SCI-Expanded)
- :CLXXXIX. **Limits on the Higgs boson lifetime and width from its decay to four charged leptons**  
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.92, no.7, 2015 (SCI-Expanded)
- CCCXC. **Search for the standard model Higgs boson produced through vector boson fusion and decaying to  $b\bar{b}$**   
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- CDLXI. **Search for new physics in events with opposite-sign leptons, jets, and missing transverse energy in pp collisions at root s=7 TeV**  
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- CDLXXXII. **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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- DLXXXIV. **Measurement of the top-quark mass in t(t)over-bar events with dilepton final states in pp collisions at root s=7 TeV**  
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Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroë J., Fabjan C., et al.  
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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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Chatrchyan S., Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., et al.

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**CDXCI. 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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**CDXCII. 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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**CDXCIII. Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC**

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**CDXCIV. Search for a Light Pseudoscalar Higgs Boson in the Dimuon Decay Channel in  $pp$  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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**CDXCV. Search for heavy, top-like quark pair production in the dilepton final state in  $pp$  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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**CDXCVI. Search for high-mass resonances decaying into tau-lepton pairs in  $pp$  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.

PHYSICS LETTERS B, vol.716, no.1, pp.82-102, 2012 (SCI-Expanded)

**CDXCVII. Measurement of the Electron Charge Asymmetry in Inclusive  $W$  Production in  $pp$  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.

PHYSICAL REVIEW LETTERS, vol.109, no.11, 2012 (SCI-Expanded)

**CDXCVIII. Search for physics beyond the standard model in events with a  $Z$  boson, jets, and missing transverse energy in  $pp$  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.

PHYSICS LETTERS B, vol.716, no.2, pp.260-284, 2012 (SCI-Expanded)

**CDXCIX. Search for pair production of first- and second-generation scalar leptoquarks 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.

PHYSICAL REVIEW D, vol.86, no.5, 2012 (SCI-Expanded)

**D. Search for a fermiophobic Higgs boson in  $pp$  collisions at  $\sqrt{s}=7$  TeV**



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

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**DI. Study of W boson production in PbPb and pp collisions at root s(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.

PHYSICS LETTERS B, vol.715, pp.66-87, 2012 (SCI-Expanded)

**DII. Search for New Physics with Same-Sign Isolated Dilepton Events with Jets and Missing Transverse Energy**

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

PHYSICAL REVIEW LETTERS, vol.109, no.7, 2012 (SCI-Expanded)

**DIII. Azimuthal Anisotropy of Charged Particles at High Transverse Momenta in Pb-Pb Collisions at root S-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.

PHYSICAL REVIEW LETTERS, vol.109, no.2, 2012 (SCI-Expanded)

**DIV. Search for heavy long-lived charged particles 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.

PHYSICS LETTERS B, vol.713, pp.408-433, 2012 (SCI-Expanded)

**DV. Search for a light charged Higgs boson in top quark decays in pp collisions at root s=7 TeV**

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

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**DVI. Search for Dark Matter and Large Extra Dimensions in pp Collisions Yielding a Photon and Missing Transverse Energy**

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

PHYSICAL REVIEW LETTERS, vol.108, no.26, 2012 (SCI-Expanded)

**DVII. Observation of a New Xi(b) Baryon**

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

PHYSICAL REVIEW LETTERS, vol.108, no.25, 2012 (SCI-Expanded)

**DVIII. Search for neutral Higgs bosons decaying to tau pairs 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.

PHYSICS LETTERS B, vol.713, no.2, pp.68-90, 2012 (SCI-Expanded)

**DIX. Measurement of the mass difference between top and antitop quarks**

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

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

**DX. Measurement of the t(t)over-bar production cross section in pp collisions at root s=7 TeV in dilepton final states containing a tau**

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

PHYSICAL REVIEW D, vol.85, no.11, 2012 (SCI-Expanded)

**DXI. Search for large extra dimensions in dimuon and dielectron events 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.

PHYSICS LETTERS B, vol.711, no.1, pp.15-34, 2012 (SCI-Expanded)

- DXII. Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at root  $s(NN)=2.76$  TeV**  
 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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- DXIII. Search for the standard model Higgs boson decaying into two photons in pp collisions at root  $s=7$  TeV**  
 Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
 PHYSICS LETTERS B, vol.710, no.3, pp.403-425, 2012 (SCI-Expanded)
- DXIV. Search for a Higgs boson in the decay channel  $H \rightarrow ZZ(\gamma\gamma) \rightarrow q(\bar{q})l(\bar{l})$  in pp collisions at root  $s=7$  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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- DXV. Search for the standard model Higgs boson decaying to bottom quarks in pp collisions at root  $s=7$  TeV**  
 Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
 PHYSICS LETTERS B, vol.710, no.2, pp.284-306, 2012 (SCI-Expanded)
- DXVI. Measurement of isolated photon production in pp and PbPb collisions at root  $s(NN)=2.76$  TeV**  
 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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- DXVII. Search for the Standard Model Higgs Boson in the Decay Channel  $H \rightarrow ZZ \rightarrow 4l$  in pp Collisions at root  $s=7$  TeV**  
 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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- DXVIII. Jet production rates in association with W and Z bosons in pp collisions 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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- DXIX. Search for the standard model Higgs boson decaying to  $W+W-$  in the fully leptonic final state in pp collisions at root  $s=7$  TeV**  
 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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- DXX. Search for Signatures of Extra Dimensions in the Diphoton Mass Spectrum at the Large Hadron Collider**  
 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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- DXXI. Search for the standard model Higgs boson in the  $H \rightarrow ZZ \rightarrow 2l2\nu$  channel in pp collisions at root  $s=7$  TeV**  
 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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- DXXII. Search for the standard model Higgs boson in the  $H \rightarrow ZZ \rightarrow l(+)l(-)\tau(+)\tau(-)$  decay channel in pp collisions at root  $s=7$  TeV**  
 Chatrchyan S., Khachatryan V., Sirunyan M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,

- Friedl M., et al.  
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- DXXXIII. **Study of high-p(T) charged particle suppression in PbPb compared to pp collisions at root s(NN)=2.76 TeV**  
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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- DXXXIV. **Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at root s=7 TeV**  
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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- DXXXV. **Combined results of searches for the standard model 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., Eroë J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.710, no.1, pp.26-48, 2012 (SCI-Expanded)
- DXXXVI. **Exclusive  $\gamma\gamma \rightarrow +\mu\mu$  - production in proton-proton collisions at  $\sqrt{s} = 7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
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- DXXXVII. **Measurement of the rapidity and transverse momentum distributions of Z bosons in pp collisions at root(s)=7 TeV**  
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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KAYIŐ TOPAKSU A., Kiminsu U., Project Supported by Higher Education Institutions, CMS'de Yenilenen PMT'lerin kazançlarının zamana göre deđiřimin incelenmesi, 2014 - 2015

KAYIŐ TOPAKSU A., Project Supported by Higher Education Institutions, 1) Measurement Of The Cross Section And Angular Correlations For Associated Production Of A Z Boson With B Hadrons In Pp Collisions At S= 7 Tev 2) Jet And Underlying Event Properties As A Function Of Charged-Particle Multiplicity In Proton-Proton Collisions At Root S=7 Tev 3) Measurement Of The W+W- Cross Section In Pp Collisions At And Limits On Anomalous Ww Gamma And Wwz Couplings" 4) Search For Narrow Resonances Using The Dijet Mass Spectrum In Pp Collisions At Root S=8 Tev", 2014 - 2015

KAYIŐ TOPAKSU A., Ođlakcı M., Project Supported by Higher Education Institutions, CMS Kalorimetre jetleri kullanılarak HPD ve SiPM'lerin kalibrasyon faktörlerinin belirlenmesi, 2014 - 2014

KAYIŐ TOPAKSU A., Project Supported by Higher Education Institutions, LHC'de CMS Deneyinde 7 - 14 TeV Kütle Merkezi Enerjisinde J/? Parçacıđı İçeren Dar Rezonansların Arařtırılması, 2011 - 2014

KAYIŐ TOPAKSU A., Project Supported by Higher Education Institutions, CERN'deki CMS Deneyinde Monte Carlo Verileri ile Kalibrasyon Çalıřmaları, 2012 - 2013

GÖKBULUT G., KAYIŐ TOPAKSU A., CB Strateji ve Bütçe Bařkanlıđı (Kalkınma Bakanlıđı) Projesi, CMS Deneyinde Dedektör Kurulumu, Yenilenmesi ve Fizik Çalıřmaları, 2010 - 2013

KAYIŐ TOPAKSU A., CB Strateji ve Bütçe Bařkanlıđı (Kalkınma Bakanlıđı) Projesi, CERN'deki CMS deneyinde ağır iyon çalıřmaları, 2004 - 2009

KAYIŐ TOPAKSU A., CB Strateji ve Bütçe Bařkanlıđı (Kalkınma Bakanlıđı) Projesi, CERN'deki CMS Deneyi için Kullanılacak

Optik ve Ölçüm Labaratuvarının Kurulması, 2003 - 2004

KAYIŞ TOPAKSU A., TUBITAK Project, CERN'deki CMS Deneyi için En İleri Kalorimetre II, 1999 - 2000

KAYIŞ TOPAKSU A., TUBITAK Project, Yüksek Enerji Fiziği CERN Nötrino Deneyleri Araştırmaları, 1992 - 1996

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Publication: 732

Citation (WoS): 32358

Citation (Scopus): 34817

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H-Index (Scopus): 87

## Scholarships

Junior Associate(2006-2011), ICTP, İtalya, Other International Organizations, 2006 - 2011

Research Fellow (2003-2005), CERN, Cenevre, İsviçre, Other International Organizations, 2003 - 2005

Bütünleştirilmiş Doktora Burs Programı(1996-1999), TUBITAK, 1996 - 1999

## Awards

KAYIŞ TOPAKSU A., Fen-Edebiyat Fakülte Birinciliği, Çukurova Üniversitesi, June 1992

KAYIŞ TOPAKSU A., Fizik Bölüm Birincisi, Çukurova Üniversitesi, June 1992

## Non Academic Experience

CERN (Avrupa Nükleer Araştırma Merkezi)