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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 the polarizations of prompt and non-prompt [Formula presented] and  $\psi(2S)$  mesons produced in pp 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.858, 2024 (SCI-Expanded)
- II. **Search for the Z Boson Decay to  $\tau\tau\mu\mu$  in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Physical review letters, vol.133, no.16, pp.161805, 2024 (SCI-Expanded)
- III. **Observation of Enhanced Long-Range Elliptic Anisotropies Inside High-Multiplicity Jets in pp Collisions at  $\sqrt{s}=13$  TeV**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Physical review letters, vol.133, no.14, pp.142301, 2024 (SCI-Expanded)
- IV. **Searches for violation of Lorentz invariance in top quark pair production using dilepton events in 13 TeV proton-proton collisions**  
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.857, 2024 (SCI-Expanded)
- V. **Measurement of differential ZZ + jets production cross sections in pp collisions at  $s = 13$  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.10, 2024 (SCI-Expanded)
- VI. **Observation of the  $\Lambda b^0 \rightarrow J/\psi \Xi^- K^+$  decay**  
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.10, 2024 (SCI-Expanded)
- VII.  **$KS^0$  and  $\Lambda(\Lambda^-)$  two-particle femtoscopic correlations in PbPb collisions at  $s_{NN}=5.02$  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.857, 2024 (SCI-Expanded)
- VIII. **Search for Higgs boson pair production with one associated vector boson in proton-proton collisions at  $s = 13$  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.10, 2024 (SCI-Expanded)
- IX. **Measurement of the production cross section of a Higgs boson with large transverse momentum in its decays to a pair of  $\tau$  leptons 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.857, 2024 (SCI-Expanded)
- X. **Exploring atmospheric neutrino oscillations at ESSnuSB**  
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.10, 2024 (SCI-Expanded)
- XI. **Performance of CMS muon reconstruction from proton-proton to heavy ion collisions**  
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.  
Journal of Instrumentation, vol.19, no.9, 2024 (SCI-Expanded)
- XII. **Search for a resonance decaying to a W boson and a photon in proton-proton collisions at  $s = 13$  TeV using leptonic W boson decays**  
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.9, 2024 (SCI-Expanded)

- XIII. **Performance of the CMS electromagnetic calorimeter in pp collisions at  $\sqrt{s} = 13$  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.9, 2024 (SCI-Expanded)
- XIV. **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)
- XV. **Measurement of multijet azimuthal correlations and determination of the strong coupling 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.  
European Physical Journal C, vol.84, no.8, 2024 (SCI-Expanded)
- XVI. **Evidence for tWZ production in proton-proton collisions at  $s=13$  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)
- XVII. **Constraints on anomalous Higgs boson couplings from its production and decay using the WW channel 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.  
European Physical Journal C, vol.84, no.8, 2024 (SCI-Expanded)
- XVIII. **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)
- XIX. **Search for long-lived particles 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.3, 2024 (SCI-Expanded)
- XX. **Search for new physics in high-mass diphoton events from 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.  
Journal of High Energy Physics, vol.2024, no.8, 2024 (SCI-Expanded)
- XXI. **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)
- XXII. **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)
- XXIII. **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)
- XXIV. **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)

- XXV. **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)
- XXVI. **Search for ZZ and ZH production in the  $bb\bar{b}\bar{b}$  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)
- XXVII. **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)
- XXVIII. **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)
- XXIX. **Search for a scalar or pseudoscalar dilepton resonance produced in association with a massive vector boson or top quark-antiquark 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)
- XXX. **Combination of Measurements of the Top Quark Mass from Data Collected by the ATLAS and CMS Experiments at  $\sqrt{s}=7$  and  $8 \text{ TeV}$**   
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)
- XXXI. **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)
- XXXII. **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)
- XXXIII. **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)
- XXXIV. **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)
- XXXV. **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)
- XXXVI. **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)
- XXXVII. **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)
- XXXVIII. **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)
- XXXIX. **Search for the lepton flavor violating  $\tau \rightarrow 3\mu$  decay 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.853, 2024 (SCI-Expanded)
- XL. **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)
- XLI. **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)
- XLII. **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)
- XLIII. **Search for  $W'$  bosons decaying to a top and a bottom quark in leptonic final states 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.5, 2024 (SCI-Expanded)
- XLIV. **Measurement of the primary Lund jet plane density 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.5, 2024 (SCI-Expanded)
- XLV. **Inclusive and differential cross section measurements of  $t\bar{t}b\bar{b}$  production in the lepton+jets channel 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.5, 2024 (SCI-Expanded)
- XLVI. **Search for a new resonance decaying into two spin-0 bosons in a final state with two photons and two bottom quarks 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.  
Journal of High Energy Physics, vol.2024, no.5, 2024 (SCI-Expanded)
- XLVII. **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)
- XLVIII. **Search for long-lived particles decaying to final states with a pair of muons in proton-proton collisions at  $s = 13.6 \text{ TeV}$**   
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.5, 2024 (SCI-Expanded)
- XLIX. **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)
- L. **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)
- LI. **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)
- LII. **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)
- LIII. **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)
- LIV. **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)
- LV. **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)
- LVI. **Study of azimuthal anisotropy of  $Y(1S)$  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)
- LVII. **Search for long-lived heavy neutral leptons with lepton flavour conserving or violating decays to a jet and a charged lepton**  
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.3, 2024 (SCI-Expanded)
- LVIII. **Search for Scalar Leptoquarks Produced via  $\tau$ -Lepton-Quark Scattering in pp Collisions at  $\sqrt{s}=13$  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.  
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- LIX. **Two-particle Bose-Einstein correlations and their Lévy parameters in PbPb collisions at Formula Presented TeV**  
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- CXXIII. **First measurement of the cross section for top quark pair production with additional charm jets using dileptonic final states in pp collisions at root s=13 TeV**  
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- CXXIV. **Search for top squark production in fully hadronic final states in proton-proton collisions at root s=13 TeV**  
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- CXXV. **Search for W ' bosons decaying to a top and a bottom quark at root s=13 TeV in the hadronic final state**  
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- CXXVI. **Constraints on the Initial State of Pb-Pb Collisions via Measurements of Z-Boson Yields and Azimuthal Anisotropy at root s(NN)=5.02 TeV**  
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- CXXVII. **Search for lepton-flavor violating decays of the Higgs boson in the mu tau and e tau final states in proton-proton collisions at root s=13 TeV**  
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- CXXVIII. **Hard color-singlet exchange in dijet events in proton-proton collisions at root s=13 TeV**  
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- CXXXIV. **Measurement of the W gamma Production Cross Section in Proton-Proton Collisions at root  $s=13$  TeV and Constraints on Effective Field Theory Coefficients**  
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- CXXXVII. **In-medium modification of dijets in PbPb collisions at root  $s(NN)=5.02$  TeV**  
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- CXL. **First measurement of large area jet transverse momentum spectra in heavy-ion collisions**  
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- CXLI. **Duffin-Kemmer-Petiau equation and thermodynamic quantities**  
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- CXLII. **Construction and commissioning of CMS CE prototype silicon modules**  
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- CXLIV. **The DAQ system of the 12,000 channel CMS high granularity calorimeter prototype**  
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- CXLV. **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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- CXLVI. **Studies of charm and beauty hadron long-range correlations in pp and pPb collisions at LHC energies**  
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- CXLVIII. **Search for the lepton flavor violating decay  $\tau \rightarrow 3 \mu$  in proton-proton collisions at root s=13 TeV**  
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- CL. **Evidence for Higgs boson decay to a pair of muons**  
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- CLI. **Evidence for electroweak production of four charged leptons and two jets in proton-proton collisions at root s=13 TeV**  
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- CLV. **Inclusive search for highly boosted Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CLVI. **Search for bottom-type, vectorlike quark pair production in a fully hadronic final state in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CLIX. **Measurement of B-c(2S)(+) and B-c\*(2S)(+) cross section ratios in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CLX. **W+ W- boson pair production in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CLXII. **Measurements of the W boson rapidity, helicity, double-differential cross sections, and charge asymmetry in pp collisions at  $\sqrt{s}=13$  TeV**  
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- CLXIII. **Measurements of production cross sections of WZ and same-sign WW boson pairs in association with two jets in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- PHYSICAL REVIEW LETTERS, vol.125, no.15, 2020 (SCI-Expanded)
- CLXVI. **Performance of the CMS Level-1 trigger in proton-proton collisions at root s=13 TeV**  
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- CLXVIII. **Search for a light charged Higgs boson in the H-+/- -> cs channel in proton-proton collisions at root s=13 TeV**  
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- CLXX. **Studies of Charm Quark Diffusion inside Jets Using Pb-Pb and pp Collisions at root s(NN)=5.02 TeV**  
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- CLXXI. **Search for supersymmetry in proton-proton collisions at  $\sqrt{s}=13$  TeV in events with high-momentum Z bosons and missing transverse momentum**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., et al.  
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- CLXXII. **Measurement of the Y(1S) pair production cross section and search for resonances decaying to Y(1S)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., Ero J., Del Valle A. E., Flechl M., et al.  
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- CLXXIII. **Measurement of CKM matrix elements in single top quark t-channel production in proton-proton collisions at root s=13 TeV**  
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- CLXXIV. **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**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.  
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- CLXXV. **Measurement of the associated production of a Z boson with charm or bottom quark jets in proton-proton collisions at root s=13 TeV**  
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- CLXXVII. **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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- CLXXVIII. **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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- CLXXX. **Search for disappearing tracks in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.
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- CLXXXI. **Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV**  
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- JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2020 (SCI-Expanded)
- CLXXXII. **The production of isolated photons in PbPb and pp collisions at  $\sqrt{s(NN)}=5.02$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.
- JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2020 (SCI-Expanded)
- CLXXXIII. **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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- CLXXXIV. **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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- CLXXXV. **Measurements with silicon photomultipliers of dose-rate effects in the radiation damage of plastic scintillator tiles in the CMS hadron endcap calorimeter**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.
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- CLXXXVI. **Measurement of the top quark forward-backward production asymmetry and the anomalous chromoelectric and chromomagnetic moments in pp 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.
- JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2020 (SCI-Expanded)
- CLXXXVII. **Search for dijet resonances using events with three jets in proton-proton collisions at  $\sqrt{s}=13$  TeV**

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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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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)

### CXC. **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 $\sqrt{s}=7$ 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.

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### CXCI. **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)

### CXCII. **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**

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)

### CXCIII. **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)

### CXCIV. **Measurement of differential cross sections and charge ratios for t-channel single top quark production in proton-proton collisions at $\sqrt{s}=13$ TeV**

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

EUROPEAN PHYSICAL JOURNAL C, vol.80, no.5, 2020 (SCI-Expanded)

### CXCV. **Calibration of the CMS hadron calorimeters using proton-proton collision data at $\sqrt{s}=13$ TeV**

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

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

### CXCVI. **Search for an excited lepton that decays via a contact interaction to a lepton and two jets in proton-proton collisions at $\sqrt{s}=13$ TeV**

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

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

### CXCVII. **Production of $\Lambda^+(c)$ baryons in proton-proton and lead-lead collisions at $\sqrt{s}=5.02$ 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.

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- CXCVIII. **Search for heavy Higgs bosons decaying to a top quark pair 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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- CXCIX. **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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- CC. **Constraints on the  $\chi(c1)$  versus  $\chi(c2)$  Polarizations in Proton-Proton Collisions at root  $s=8$  TeV**  
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., Fruehwirth R., et al.  
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- CCI. **Measurement of the  $t(\bar{t})$  over  $b(\bar{b})$  production cross section in the all-jet final state in pp collisions at root  $s=13$  TeV**  
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- CCII. **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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- CCIII. **Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of 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.  
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- CCIV. **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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- CCV. **Running of the top quark mass from proton-proton collisions at root  $s=13$  TeV**  
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- CCVI. **Bose-Einstein correlations of charged hadrons in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CCVII. **Observation of the  $\Lambda(0)(b) \rightarrow J/\psi \Lambda \phi$  decay in proton-proton collisions at root  $s=13$  TeV**  
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- CCVIII. **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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- JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2020 (SCI-Expanded)
- CCIX. **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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- JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2020 (SCI-Expanded)
- CCX. **Search for supersymmetry in pp collisions at  $\sqrt{s}=13$  TeV with 137 fb<sup>-1</sup> in final states with a single lepton using the sum of masses of large-radius jets**  
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- PHYSICAL REVIEW D, vol.101, no.5, 2020 (SCI-Expanded)
- CCXI. **Search for physics beyond the standard model in multilepton final states in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2020 (SCI-Expanded)
- CCXII. **Search for lepton flavour violating decays of a neutral heavy Higgs boson to  $\mu\tau$  and  $e\tau$  in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2020 (SCI-Expanded)
- CCXIII. **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  $\sqrt{s}=13$  TeV**  
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- CCXIV. **A search for the standard model Higgs boson decaying to charm quarks**  
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- JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2020 (SCI-Expanded)
- CCXV. **Measurement of the top quark pair production cross section in dilepton final states containing one tau lepton in pp collisions at  $\sqrt{s}=13$  TeV**  
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- JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2020 (SCI-Expanded)
- CCXVI. **Combined search for supersymmetry with photons in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
- PHYSICS LETTERS B, vol.801, 2020 (SCI-Expanded)
- CCXVII. **Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- JOURNAL OF INSTRUMENTATION, vol.15, no.2, 2020 (SCI-Expanded)
- CCXVIII. **Search for top squark pair production in a final state with two tau leptons in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CCXIX. **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.

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- CCXX. **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.  
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- CCXXI. **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)
- CCXXII. **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)
- CCXXIII. **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**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Escalante Del Valle A., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2020 (SCI-Expanded)
- CCXXIV. **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**  
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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- CCXXV. **Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCXXVI. **Evidence for WW production from double-parton interactions in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
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- CCXXVII. **Measurement of the differential Drell-Yan cross section in proton-proton collisions at root s=13 TeV**  
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JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2019 (SCI-Expanded)
- CCXXVIII. **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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- CCXXIX. **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)
- CCXXX. **Search for Low-Mass Quark-Antiquark Resonances Produced in Association with a Photon at root  $s=13$  TeV**  
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PHYSICAL REVIEW LETTERS, vol.123, no.23, 2019 (SCI-Expanded)
- CCXXXI. **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)
- CCXXXII. **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**  
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- CCXXXIII. **Measurements of differential Z boson production cross sections in proton-proton collisions at root  $s=13$  TeV**  
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- CCXXXIV. **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)
- CCXXXV. **Search for long-lived particles using delayed photons in proton-proton collisions at root  $s=13$  TeV**  
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- CCXXXVI. **Study of the  $B^+ \rightarrow J/\psi(\Lambda_b)$  decay in proton-proton collisions at root  $s=8$  TeV**  
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- CCXXXVII. **Search for the production of four top quarks in the single -lepton and opposite -sign dilepton final states in proton -proton collisions at  $\sqrt{s}=13$  TeV**  
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- CCXXXVIII. **Search for new physics in top quark production in dilepton final states in proton-proton collisions at root  $s=13$  TeV**  
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EUROPEAN PHYSICAL JOURNAL C, vol.79, no.11, 2019 (SCI-Expanded)
- CCXXXIX. **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)
- CCXL. **Search for supersymmetry using Higgs boson to diphoton decays at root  $s=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.



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- CCXLI. **Search for anomalous electroweak production of vector boson pairs in association with two jets in proton-proton collisions at 13 TeV**  
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- CCXLII. **Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio 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)
- CCXLIII. **Measurement of the top quark Yukawa coupling from  $t(\bar{t})$  over-bar kinematic distributions in the lepton plus jets final state in proton-proton collisions at root  $s=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCXLIV. **Search for supersymmetry in proton-proton collisions at 13 TeV in final states with jets and missing transverse momentum**  
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- CCXLV. **Charged-particle angular correlations in XeXe collisions at root  $s(NN)=5.44$  TeV**  
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- CCXLVI. **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 root  $s=13$  TeV**  
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- CCXLVII. **Measurement of B-s(0) meson production in pp and PbPb collisions at root  $S=5.02$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCXLVIII. **Search for dark matter in events with a leptoquark and missing transverse momentum in proton-proton collisions at 13 TeV**  
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- CCXLIX. **Search for charged Higgs bosons in the  $H^{+/-} \rightarrow \tau^{+/-}\nu(\tau)$  decay channel in proton-proton collisions at  $s=13$  TeV**  
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- CCL. **Search for the associated production of the Higgs boson and a vector boson in proton-proton collisions at  $\sqrt{s}=13$  TeV via Higgs boson decays to leptons**  
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- CCLI. **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., Ambrogio 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)

- CCLII. **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.  
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- CCLIII. **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)
- CCLIV. **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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- CCLV. **Search for associated production of a Higgs boson and a single top quark in proton-proton collisions at root s=13 TeV**  
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- CCLVI. **Combined measurements of Higgs boson couplings in proton-proton collisions at v s=13TeV**  
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- CCLVII. **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**  
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- CCLVIII. **Search for an L-mu - L-tau gauge boson using Z -> 4 mu events in proton-proton collisions at root s=13 TeV**  
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- CCLIX. **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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- CCLX. **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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- CCLXI. **Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at root s=13 TeV**  
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- CCLXII. **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.  
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- CCLXIII. **Measurements of the pp WZ inclusive and differential production cross sections and constraints on charged anomalous triple gauge couplings at  $\sqrt{s}=13$  TeV**  
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- CCLXIV. **Search for nonresonant Higgs boson pair production in the  $b(b)\overline{b}(b)\overline{b}$  final state at  $\sqrt{s}=13$  TeV**  
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- CCLXV. **Search for contact interactions and large extra dimensions in the dilepton mass spectra from proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CCLXVI. **Measurements of properties of the Higgs boson decaying to a W boson pair in pp collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCLXVII. **Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two leptons and two jets in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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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- CCLXVIII. **Combination of Searches for Higgs Boson Pair Production in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
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- CCLXIX. **Measurement of prompt  $\psi(2S)$  production cross sections in proton-lead and proton-proton collisions at  $\sqrt{s(NN)}=5.02$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.790, pp.509-532, 2019 (SCI-Expanded)
- CCLXX. **Measurement of nuclear modification factors of  $\gamma(1S)$ ,  $\gamma(2S)$ , and  $\gamma(3S)$  mesons in PbPb collisions at  $\sqrt{s(NN)}=5.02$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CCLXXI. **Search for top quark partners with charge  $5/3$  in the same-sign dilepton and single-lepton final states in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
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- CCLXXII. **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  $\sqrt{s}=13$  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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- CCLXXIII. **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., Eroo J., Del Valle A. E., et al.  
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- CCLXXIV. **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., Eroo J., et al.  
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- CCLXXV. **Search for  $t(\bar{t})$  production in the  $H \rightarrow b(\bar{b})$  decay channel with leptonic  $t(\bar{t})$  decays in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
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- CCLXXVI. **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., Eroo J., Escalante Del Valle A., et al.  
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- CCLXXVII. **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., Eroo J., Del Valle A. E., et al.  
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- :CLXXVIII. **Search for new particles decaying to a jet and an emerging jet**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Escalante Del Valle A., et al.  
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- CCLXXIX. **Non-Gaussian elliptic-flow fluctuations in PbPb collisions at root S-NN=5.02 TeV**  
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- CCLXXX. **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., Eroo J., Del Valle A. E., et al.  
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- CCLXXXI. **Search for long-lived particles decaying into displaced jets in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A. E., et al.  
PHYSICAL REVIEW D, vol.99, no.3, 2019 (SCI-Expanded)
- CCLXXXII. **Measurements of  $t(\bar{t})$  differential cross sections in proton-proton collisions at root s=13 TeV using events containing two leptons**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A. E., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2019 (SCI-Expanded)
- :CLXXXIII. **Search for new physics in final states with a single photon and missing transverse momentum in**

**proton-proton collisions at  $\sqrt{s}=13$  TeV**

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

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**CLXXXIV. Search for pair production of second-generation leptoquarks at root s=13 TeV**

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

PHYSICAL REVIEW D, vol.99, no.3, 2019 (SCI-Expanded)

**CCLXXXV. Search for supersymmetry in events with a photon, a lepton, 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., Dragicevic M., Eroe J., Del Valle A. E., et al.

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

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

PHYSICAL REVIEW LETTERS, vol.122, 2019 (SCI-Expanded)

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

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

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

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

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

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**CLXXXIX. 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**

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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**CCXC. Angular analysis of the decay  $B^+ \rightarrow K^+ \mu^+ \mu^-$  in proton-proton collisions at root s=8 TeV**

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

PHYSICAL REVIEW D, vol.98, no.11, 2018 (SCI-Expanded)

**CCXCI. Search for pair-produced resonances decaying to quark pairs in proton-proton collisions at root s=13 TeV**

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

PHYSICAL REVIEW D, vol.98, no.11, 2018 (SCI-Expanded)

**CCXCII. 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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**CCXCIII. Event shape variables measured using multijet 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.

JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2018 (SCI-Expanded)

**CCXCIV. 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**

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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**CCXCV. Evidence for the Associated Production of a Single Top Quark and a Photon in Proton-Proton Collisions at root s=13 TeV**

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PHYSICAL REVIEW LETTERS, vol.121, no.22, 2018 (SCI-Expanded)

**CCXCVI. Measurement of jet substructure observables in t(t)-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)

**CCXCVII. Search for a charged Higgs boson decaying to charm and bottom quarks in proton-proton collisions at root s=8TeV**

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

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**CCXCVIII. Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at root s=13 TeV**

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**CCXCIX. 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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JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2018 (SCI-Expanded)

**CCC. Search for supersymmetry in events with a tau lepton pair and missing transverse momentum in proton-proton 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.

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**CCCI. Search for the decay of a Higgs boson in the ll gamma channel 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.11, 2018 (SCI-Expanded)

**CCCII. Measurement of the groomed jet mass in PbPb and pp collisions at root s(NN)=5.02 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2018 (SCI-Expanded)

**CCCIII. Charged-particle nuclear modification factors in XeXe collisions at root S-NN=5.44 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2018 (SCI-Expanded)

**CCCIV. 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., Ero J., et al.

- JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2018 (SCI-Expanded)
- CCCV. **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  $\sqrt{s}=13$  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)
- CCCVI. **Observation of the  $Z \rightarrow \psi l^{(+)}l^{(-)}$  Decay 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., Eroo J., et al.  
PHYSICAL REVIEW LETTERS, vol.121, no.14, 2018 (SCI-Expanded)
- CCCVII. **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)
- CCCVIII. **Search for dark matter produced in association with a Higgs boson decaying to  $\gamma\gamma$  or  $\tau^{(+)}\tau^{(-)}$  at  $\sqrt{s}=13$  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)
- CCCIX. **Search for a heavy resonance decaying into a Z boson and a Z or W boson in  $2l2q$  final states at  $\sqrt{s}=13$  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)
- CCCX. **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)
- CCCXI. **Search for additional neutral MSSM Higgs bosons in the  $\tau\tau$  final state in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
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- CCCXII. **Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying tau leptons at  $\sqrt{s}=13$  TeV**  
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JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2018 (SCI-Expanded)
- CCCXIII. **Search for vector-like T and B quark pairs in final states with leptons at  $\sqrt{s}=13$  TeV**  
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- CCCXIV. **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**  
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- CCCXV. **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., Eroo J., Del

- Valle A. E., et al.  
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- CCCXVI. **Search for disappearing tracks as a signature of new long-lived particles 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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- CCCXVII. **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.  
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- CCCXVIII. **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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- CCCXIX. **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., Eroo J., Del Valle A. E., et al.  
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- CCCXX. **Search for R-parity violating supersymmetry in pp collisions at root s=13 TeV using bjets 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., Eroo J., et al.  
PHYSICS LETTERS B, vol.783, pp.114-139, 2018 (SCI-Expanded)
- CCCXXI. **Nuclear modification factor of D-0 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., Eroo J., et al.  
PHYSICS LETTERS B, vol.782, pp.474-496, 2018 (SCI-Expanded)
- CCCXXII. **Electroweak production of two jets in association with a Z boson 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., Eroo J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.78, no.7, 2018 (SCI-Expanded)
- CCCXXIII. **Search for a singly produced third-generation scalar leptoquark decaying to a tau lepton and 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., Eroo J., Del Valle A. E., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2018 (SCI-Expanded)
- CCCXXIV. **Search for new physics in events with two soft oppositely charged leptons 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., Eroo J., et al.  
PHYSICS LETTERS B, vol.782, pp.440-467, 2018 (SCI-Expanded)
- CCCXXV. **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., Eroo J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2018 (SCI-Expanded)
- CCCXXVI. **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)

CCCXXVII. **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)

:CCXXVIII. **Search for the flavor-changing neutral current interactions of the top quark and the Higgs boson which decays into a pair of b quarks at root s=13 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2018 (SCI-Expanded)

CCCXXIX. **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)

CCCXXX. **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)

CCCXXXI. **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)

CCCXXXII. **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., Eroee J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2018 (SCI-Expanded)

:CCXXXIII. **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.

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:CCXXXIV. **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)

CCCXXXV. **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)

:CCXXXVI. **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)

- CCXXXVII. **Search for high-mass resonances 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., Brondolin E., Dragicevic M., Eroe J., et al.  
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- CCXXXVIII. **Search for dark matter in events with energetic, hadronically decaying top quarks and missing transverse momentum at root  $s=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2018 (SCI-Expanded)
- CCXXXIX. **Search for the X(5568) State Decaying into  $B_s(0)\pi(+/-)$  in Proton-Proton Collisions at root  $s=8$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.20, 2018 (SCI-Expanded)
- CCCXL. **Measurement of Prompt D-0 Meson Azimuthal Anisotropy in Pb-Pb Collisions at root  $S_{NN}=5.02$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.20, 2018 (SCI-Expanded)
- CCCXLI. **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)
- CCCXLII. **Search for supersymmetry in events with one lepton and multiple jets exploiting the angular correlation between the lepton and the missing transverse momentum in proton-proton collisions at root  $s=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.780, pp.384-409, 2018 (SCI-Expanded)
- CCCXLIII. **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)
- CCCXLIV. **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)
- CCCXLV. **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)
- CCCXLVI. **Suppression of Excited gamma States Relative to the Ground State in Pb-Pb Collisions at root  $s_{NN}=5.02$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.14, 2018 (SCI-Expanded)
- CCCXLVII. **Combination of inclusive and differential  $t(\bar{t})$  over-bar charge asymmetry measurements using ATLAS and CMS data at root  $S=7$  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)

:CCXLVIII. **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)

CCCXLIX. **Measurement of the associated production of a single top quark and a Z boson 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., Ero J., et al.

PHYSICS LETTERS B, vol.779, pp.358-384, 2018 (SCI-Expanded)

CCCL. **Measurement of the inclusive  $t(\bar{t})$  over-bar 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., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2018 (SCI-Expanded)

CCCLI. **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., Eroe J., et al.

PHYSICS LETTERS B, vol.778, pp.101-127, 2018 (SCI-Expanded)

CCCLII. **Comparing transverse momentum balance of b jet pairs in pp and PbPb collisions at root s(NN)=5.02 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2018 (SCI-Expanded)

CCCLIII. **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., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2018 (SCI-Expanded)

CCCLIV. **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., Eroe J., et al.

PHYSICS LETTERS B, vol.777, pp.39-63, 2018 (SCI-Expanded)

CCCLV. **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., Eroe J., et al.

PHYSICAL REVIEW LETTERS, vol.120, no.7, 2018 (SCI-Expanded)

CCCLVI. **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)

CCCLVII. **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., Eroe J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2018 (SCI-Expanded)

- CCCLVIII. **Search for resonant and nonresonant Higgs boson pair production in the  $b(b)\overline{b}l\nu l\nu$  final state in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2018 (SCI-Expanded)
- CCCLIX. **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 Haeevermaet H., Van Mechelen P., Van Spilbeeck A., et al.  
JOURNAL OF INSTRUMENTATION, vol.13, 2018 (SCI-Expanded)
- CCCLX. **Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2018 (SCI-Expanded)
- CCCLXI. **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)
- CCCLXII. **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 Haeevermaet H., Van Mechelen P., Van Spilbeeck A., et al.  
JOURNAL OF INSTRUMENTATION, vol.12, 2017 (SCI-Expanded)
- CCCLXIII. **Measurement of charged pion, kaon, and proton production in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.  
PHYSICAL REVIEW D, vol.96, no.11, 2017 (SCI-Expanded)
- CCCLXIV. **Search for a heavy composite Majorana neutrino in the final state with two leptons and two 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., Ero J., et al.  
PHYSICS LETTERS B, vol.775, pp.315-337, 2017 (SCI-Expanded)
- CCCLXV. **Search for dark matter produced in association with heavy-flavor quark pairs in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.12, 2017 (SCI-Expanded)
- CCCLXVI. **Search for Evidence of the Type-III Seesaw Mechanism in Multilepton Final States in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.119, no.22, 2017 (SCI-Expanded)
- CCCLXVII. **Measurement of the triple-differential dijet cross section in proton-proton collisions at  $\sqrt{s}=8$  TeV and constraints on parton distribution functions**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.  
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- CCCLXVIII. **Measurements of the associated production of a Z boson and b jets in pp collisions at  $\sqrt{s}=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E.,

- Dragicevic M., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.11, 2017 (SCI-Expanded)
- CCCLXIX. **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)
- CCCLXX. **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)
- CCCLXXI. **Search for Higgs boson pair production in the  $b\bar{b}\tau$  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)
- CCCLXXII. **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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2017 (SCI-Expanded)
- CCCLXXIII. **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)
- CCCLXXIV. **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)
- CCCLXXV. **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)
- CCCLXXVI. **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)
- CCCLXXVII. **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)
- CCCLXXVIII. **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)
- CCCLXXIX. **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)
- CCCLXXX. **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)
- CCCLXXXI. **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)
- CCLXXXII. **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)
- CLXXXIII. **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)
- CLXXXIV. **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.  
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- CCLXXXV. **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)
- CLXXXVI. **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.  
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- CLXXXVII. **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.  
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- LXXXVIII. **Search for electroweak production of charginos in final states with two T leptons in pp collisions at  $\sqrt{s}=8$  TeV**  
Khachatryan V., SIRUNYAN A. M., Wolfgang A., Tumasyan A., ASILAR E., BRANDSTETTER J., BERGAUER T., DUMANOĞLU İ., KAYIŞ TOPAKSU A., Collaboration C.  
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- CLXXXIX. **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., Eroe J., et al.  
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- CCCXC. **Observation of Charge-Dependent Azimuthal Correlations in p-Pb Collisions and Its Implication for the Search for the Chiral Magnetic Effect**  
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- CDLV. **Interpretation of searches for supersymmetry with simplified models**  
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- CDLVI. **Measurement of neutral strange particle production in the underlying event in proton-proton**

**collisions at root s=7 TeV**

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PHYSICAL REVIEW D, vol.88, no.5, 2013 (SCI-Expanded)

**CDLVII. Searches for Higgs bosons in pp collisions at root s=7 and 8 TeV in the context of four-generation and fermiophobic models**

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**CDLVIII. Inclusive Search for Supersymmetry Using Razor Variables in pp Collisions at root s=7 TeV**

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

PHYSICAL REVIEW LETTERS, vol.111, no.8, 2013 (SCI-Expanded)

**CDLIX. Measurement of masses in the t(t)over-tilde system by kinematic endpoints 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.

EUROPEAN PHYSICAL JOURNAL C, vol.73, no.7, 2013 (SCI-Expanded)

**CDLX. search for new physics in events with same-sign dileptons and b jets in pp collisions at root s = 8 TeV**

EŞKUT E., DUMANOĞLU İ., KAYIŞ TOPAKSU A., ÖNENGÜT G., POLATÖZ A.

JOURNAL OF HIGH ENERGY PHYSICS, no.7, pp.1-18, 2013 (SCI-Expanded)

**CDLXI. Search for narrow resonances using the dijet mass spectrum in pp collisions at root s=8 TeV**

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

PHYSICAL REVIEW D, vol.87, no.11, 2013 (SCI-Expanded)

**CDLXII. Measurements of differential jet cross sections in proton-proton collisions at root s=7 TeV with the CMS detector**

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

PHYSICAL REVIEW D, vol.87, no.11, 2013 (SCI-Expanded)

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

POLATÖZ A., DUMANOĞLU İ., EŞKUT E., KAYIŞ TOPAKSU A., Öngüt G.

PHYSICS LETTERS B, vol.718, pp.752-772, 2013 (SCI-Expanded)

**CDLXIV. Search for heavy resonances in the W/Z-tagged dijet mass spectrum in pp collisions at 7 TeV**

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

PHYSICS LETTERS B, vol.723, pp.280-301, 2013 (SCI-Expanded)

**CDLXV. Search for a standard-model-like Higgs boson with a mass in the range 145 to 1000 GeV at the LHC**

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

EUROPEAN PHYSICAL JOURNAL C, vol.73, no.6, 2013 (SCI-Expanded)

**CDLXVI. Search for a Higgs boson decaying into a b-quark pair and produced in association with b quarks in proton-proton collisions at 7 TeV**

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

PHYSICS LETTERS B, vol.722, pp.207-232, 2013 (SCI-Expanded)

**CDLXVII. Search for long-lived particles in events with photons and missing energy in proton-proton collisions at root s=7 TeV**

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

- PHYSICS LETTERS B, vol.722, pp.273-294, 2013 (SCI-Expanded)
- CDLXVIII. **Search for the standard model Higgs boson produced in association with a top-quark pair in pp collisions at the LHC**  
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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- CDLXIX. **Search for supersymmetry in pp collisions at root s=7 TeV in events with a single lepton, jets, and missing transverse momentum**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroo J., Fabjan C., et al.  
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- CDLXX. **Measurement of associated production of vector bosons and top quark-antiquark pairs in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroo J., Fabjan C., et al.  
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- CDLXXI. **Search in leptonic channels for heavy resonances decaying to long-lived neutral particles**  
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- CDLXXII. **Study of the Mass and Spin-Parity of the Higgs Boson Candidate via Its Decays to Z Boson Pairs**  
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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- CDLXXIII. **Measurement of the sum of WW and WZ production with W plus dijet events in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroo J., Fabjan C., et al.  
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- CDLXXIV. **Search for exotic resonances decaying into WZ/ZZ in pp collisions at root s=7 TeV**  
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- CDLXXV. **Search for contact interactions in mu(+)mu(-) events in pp collisions at root s = 7 TeV**  
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- CDLXXVI. **Search for supersymmetry in events with photons and low missing transverse energy in pp collisions at root s=7 TeV**  
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- CDLXXVII. **Measurement of the Upsilon(1S), Upsilon(2S), and Upsilon(3S) Polarizations in pp Collisions at root s 7 TeV**  
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- DLXXVIII. **Search for Pair Production of Third-Generation Leptoquarks and Top Squarks in pp Collisions at root s=7 TeV**  
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- CDLXXIX. **Search for flavor changing neutral currents in top quark decays in pp collisions at 7 TeV**  
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- CDLXXX. **Search for new physics in events with opposite-sign leptons, jets, and missing transverse energy in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Collaboration C. M. S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroev J., Fabjan C., et al.  
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- CDLXXXI. **Observation of a diffractive contribution to dijet production in proton-proton collisions at  $\sqrt{s}=7$  TeV**  
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- DLXXXIII. **Measurement of the Azimuthal Anisotropy of Neutral Pions in Pb-Pb Collisions at  $\sqrt{s(NN)}=2.76$  TeV**  
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- CDLXXXV. **Search for a  $W'$  boson decaying to a bottom quark and a top quark in pp collisions at  $\sqrt{s}=7$  TeV**  
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- DLXXXVI. **Measurement of the elliptic anisotropy of charged particles produced in PbPb collisions at  $\sqrt{s(NN)}=2.76$  TeV**  
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- DLXXXVII. **Search for a narrow, spin-2 resonance decaying to a pair of Z bosons in the  $q(q)\overline{b}l^{(+)}l^{(-)}$  final state**  
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- CDXCIV. **Search for resonant t(t)over-bar production in lepton plus jets events in pp collisions at root s=7 TeV**  
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- CDXCVI. **Measurement of the single-top-quark t-channel cross section in pp collisions at root s=7 TeV**  
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- CDXCVII. **Measurement of the top-quark mass in t(t)over-bar events with lepton plus jets final states in pp collisions at root s=7 TeV**  
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- CDXCVIII. **Search for third-generation leptoquarks and scalar bottom quarks in pp collisions at root s=7 TeV**  
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- D. **Combined search for the quarks of a sequential fourth generation**  
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- DI. **Observation of Z decays to four leptons with the CMS detector at the LHC**  
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- DVI. **Inclusive and differential measurements of the t(t)over-bar charge asymmetry in proton-proton collisions root s=7 TeV**  
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- DXI. **Search for supersymmetry in events with b-quark jets and missing transverse energy in pp collisions at 7 TeV**  
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- DXXXIV. **Study of W boson production in PbPb and pp collisions at root s(NN)=2.76 TeV**  
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- DXXXVI. **Azimuthal Anisotropy of Charged Particles at High Transverse Momenta in Pb-Pb Collisions at root S-NN=2.76 TeV**  
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- DXXXVII. **Search for heavy long-lived charged particles in pp collisions at root s=7 TeV**  
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- DXXXVIII. **Search for Dark Matter and Large Extra Dimensions in pp Collisions Yielding a Photon and Missing Transverse Energy**  
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- DXXXIX. **Search for neutral Higgs bosons decaying to tau pairs in pp collisions at root s=7 TeV**  
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- DXXXII. **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**  
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- DXXXIII. **Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at root s(NN)=2.76 TeV**  
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- DXXXIV. Search for large extra dimensions in dimuon and dielectron events in pp collisions at root s=7 TeV**  
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- DXXXV. Search for the standard model Higgs boson decaying to bottom quarks in pp collisions at root s=7 TeV**  
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- DXXXVI. Search for a Higgs boson in the decay channel  $H \rightarrow ZZ^{(*)} \rightarrow q(\bar{q})\ell(\bar{\ell})$  in pp collisions at root s=7 TeV**  
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- DXXXVII. Measurement of isolated photon production in pp and PbPb collisions at root s(NN)=2.76 TeV**  
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- DXXXIX. Search for the Standard Model Higgs Boson in the Decay Channel  $H \rightarrow ZZ \rightarrow 4\ell$  in pp Collisions at root s=7 TeV**  
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- DXL. Study of high-p(T) charged particle suppression in PbPb compared to pp collisions at root s(NN)=2.76 TeV**  
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- DXLI. Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at root s=7 TeV**  
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- DXLII. 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**  
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- DXLIII. Search for Signatures of Extra Dimensions in the Diphoton Mass Spectrum at the Large Hadron Collider**  
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- DXLIV. Search for the standard model Higgs boson in the  $H \rightarrow ZZ \rightarrow 2l2\nu$  channel in pp collisions at root s=7 TeV**  
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- DXLIV. **Combined results of searches for the standard model Higgs boson in pp collisions at root s=7 TeV**  
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- DXLVI. **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**  
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- DXLVII. **Jet production rates in association with W and Z bosons in pp collisions at  $\sqrt{s} = 7$  TeV**  
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- DXLVIII. **Exclusive  $\gamma\gamma \rightarrow +\mu\mu -$  production in proton-proton collisions at  $\sqrt{s} = 7$  TeV**  
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- DXLIX. **J/psi and psi(2S) production in pp collisions at root s=7 TeV**  
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- DL. **Measurement of the rapidity and transverse momentum distributions of Z bosons in pp collisions at root(s)=7 TeV**  
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- DLI. **Inclusive search for squarks and gluinos in pp collisions at root s=7 TeV**  
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- DLII. **Forward energy flow, central charged-particle multiplicities, and pseudorapidity gaps in W and Z boson events from pp collisions at root s=7 TeV**  
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- DLIII. **Performance of tau-lepton reconstruction and identification in CMS**  
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- DLIV. **Search for a Vectorlike Quark with Charge 2/3 in t plus Z Events from pp Collisions at root s 7 TeV**  
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Friedl M., et al.  
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- DLV. **Measurement of the weak mixing angle with the Drell-Yan process in proton-proton collisions at the LHC**  
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- DLVI. **Search for light resonances decaying into pairs of muons as a signal of new physics**

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- DLVII. **Search for Supersymmetry at the LHC in Events with Jets and Missing Transverse Energy**  
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- DLVIII. **Measurement of the  $t\bar{t}$  production cross section in pp collisions at 7 TeV in lepton plus jets events using b-quark jet identification**  
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- DLIX. **Search for New Physics with a Monojet and Missing Transverse Energy in pp Collisions at  $\sqrt{s}=7$  TeV**  
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- DLX. **Determination of jet energy calibration and transverse momentum resolution in CMS**  
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- DLXI. **Search for  $B\text{-}s(0) \rightarrow \mu^{+}\mu^{-}$  and  $B\text{-}0 \rightarrow \mu^{+}\mu^{-}$  Decays in pp Collisions at  $\sqrt{s}=7$  TeV**  
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- DLXII. **Measurement of energy flow at large pseudorapidities in pp collisions at  $\sqrt{s}=0.9$  and 7 TeV**  
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- DLXIII. **Search for resonances in the dijet mass spectrum from 7 TeV pp collisions at CMS**  
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- DLXIV. **A search for excited leptons in pp collisions at  $\sqrt{s}=7$  TeV**  
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- DLXV. **Inclusive b-hadron production cross section with muons in pp collisions at  $\sqrt{s}=7$  TeV**  
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- DLXVI. **Measurement of  $B\bar{B}$  angular correlations based on secondary vertex reconstruction at  $\sqrt{s}=7$  TeV**  
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Frühwirth R., et al.  
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- DLXVII. **Search for physics beyond the standard model using multilepton signatures in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
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- DLXVIII. **Measurement of the differential cross section for isolated prompt photon production in pp collisions**

at 7 TeV

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DLXX. **Measurement of the B-s(0) Production Cross Section with B-s(0) -> J/psi phi Decays in pp Collisions at root s=7 TeV**

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DLXX. **Search for first generation scalar leptoquarks in the e nu jj channel in pp collisions at root s=7 TeV**

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

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DLXXI. **Measurement of charm production in neutrino charged-current interactions**

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DLXXII. **Measurement of the Inclusive Jet Cross Section in pp Collisions at root s=7 TeV**

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DLXXIII. **Search for Three-Jet Resonances in pp Collisions at root s=7 TeV**

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DLXXIV. **Measurement of the t-Channel Single Top Quark Production Cross Section in pp Collisions at root s=7 TeV**

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DLXXV. **Measurement of the ratio of the 3-jet to 2-jet cross sections in pp collisions at root s=7 TeV**

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

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DLXXVI. **Indications of Suppression of Excited Upsilon States in Pb-Pb Collisions at root(NN)-N-s=2.76 TeV**

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DLXXVII. **Measurement of the Polarization of W Bosons with Large Transverse Momenta in W plus jets Events at the LHC**

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

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DLXXVIII. **Search for a heavy bottom-like quark in pp collisions at root s=7 TeV**

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DLXXIX. **Measurement of the t(t)over-bar production cross section and the top quark mass in the dilepton channel in pp collisions at root s=7 TeV**

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- DLXXX. **Measurement of W gamma and Z gamma production in pp collisions at root s=7 TeV**  
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- DLXXXI. **Search for a W ' boson decaying to a muon and a neutrino in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.  
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- DLXXXII. **Search for supersymmetry in events with b jets and missing transverse momentum at the LHC**  
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- DLXXXIII. **Measurement of the differential dijet production cross section in proton-proton collisions at root s=7 TeV**  
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- DLXXXIV. **Search for physics beyond the standard model in opposite-sign dilepton events in pp collisions at root s=7 TeV**  
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- DLXXXV. **Search for supersymmetry in events with a lepton, a photon, and large missing transverse energy in pp collisions at root s=7 TeV**  
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- DLXXXVI. **Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy at the LHC**  
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- DLXXXVII. **Search for Neutral Minimal Supersymmetric Standard Model Higgs Bosons Decaying to Tau Pairs in pp Collisions at root s=7 TeV**  
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- DLXXXVIII. **Search for Supersymmetry in pp Collisions at root s=7 TeV in Events with Two Photons and Missing Transverse Energy**  
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- DLXXXIX. **Measurement of Dijet Angular Distributions and Search for Quark Compositeness in pp Collisions at root s=7 TeV**  
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- DXC. **Search for Pair Production of First-Generation Scalar Leptoquarks in pp Collisions at root s=7 TeV**  
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- PHYSICAL REVIEW LETTERS, vol.106, no.20, 2011 (SCI-Expanded)
- DXCI. Study of Z Boson Production in PbPb Collisions at  $\sqrt{s(NN)}=2.76$  TeV**  
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- DXCII. Strange particle production in pp collisions at  $\sqrt{s}=0.9$  and 7 TeV**  
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- DXCIII. Measurement of  $W+W^-$  production and search for the Higgs boson 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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- DXCIV. First measurement of hadronic event shapes in pp collisions at  $\sqrt{s}=7$  TeV**  
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- DXCV. Measurement of Bose-Einstein correlations in pp collisions at  $\sqrt{s}=0.9$  and 7 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., Fruehwirth R., et al.  
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## Books & Book Chapters

### I. Düzlemde Hareket

KAYIŞ TOPAKSU A.

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## Refereed Congress / Symposium Publications in Proceedings

- I. **First CMS Results at 13 TeV**  
Ronchese P., ÖZDEMİR K., HOŞ İ., ADIGÜZEL A., GÖKBULUT G., DUMANOĞLU İ., EŞKUT E., POLATÖZ A., KAYIŞ TOPAKSU A., CMS C.  
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- II. **Z W jets production at 8 13 TeV in CMS**  
ÖCALAN K., ÖZDEMİR K., HOŞ İ., ADIGÜZEL A., KANGAL E. E., DUMANOĞLU İ., EŞKUT E., GÖKBULUT G., KAYIŞ TOPAKSU A., POLATÖZ A., et al.  
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- III. **Exocita searches at 13 TeV by CMS**  
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- IV. **Recent Results from CMS**  
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- V. **Recent forward physics and diffraction results from CMS**  
Veres G., ÖZDEMİR K., HOŞ İ., ADIGÜZEL A., GÖKBULUT G., DUMANOĞLU İ., EŞKUT E., POLATÖZ A., KAYIŞ TOPAKSU A., CMS C.  
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- VI. **Higgs to tau tau Anaysis in the CMS experiment**  
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- VII. **Standard Model Results of CMS at 13 TeV**  
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- VIII. **The CMS Experiment at the CERN LHC**  
KAYIŞ TOPAKSU A.  
TESNAT 2016 International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology, 28 - 30 April 2016
- IX. **Heavy Ion Results of the CMS experiment**  
Boimska B., ÖZDEMİR K., HOŞ İ., ADIGÜZEL A., KANGAL E. E., DUMANOĞLU İ., EŞKUT E., POLATÖZ A., GÖKBULUT G., KAYIŞ TOPAKSU A., et al.  
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- X. **MPI and UE corrections to jet measurementns and influence on PDF determination and alfas**  
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- XII. **Recent charm production and neutrino oscillation results from the CHORUS experiment**  
Kayis-Topaksu A.  
17th International Conference on Particles and Nuclei, Santa Fe, Argentina, 23 - 30 October 2005, vol.842, pp.855-857

## Supported Projects

- KAYIŞ TOPAKSU A., Uslan Zorbakır E., Project Supported by Higher Education Institutions, CMS deneyinde 2017 ve 2018 yıllarında 13 TeV'de alınan çarpışma verisi ile dijet kütle tesir kesiti ölçümleri, 2022 - Continues
- KAYIŞ TOPAKSU A., Tok U. G., Project Supported by Higher Education Institutions, 13 TeV'de Razor değişkenleri kullanılarak itirilmiş top kuark etiketleme yöntemi ile yeni fizik araştırmaları: İstatistiksel Analiz, 2019 - Continues
- KAYIŞ TOPAKSU A., EU Framework Program Project, Feasibility Study for employing the uniquely powerful ESS linear accelerator to generate an intense neutrino beam for leptonic CP violation discovery and measurement, 2017 - Continues
- KAYIŞ TOPAKSU A., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, CMS Deneyinde HKAL'in Yenilenme/İyileştirme Çalışmaları ve fizik Analizleri, 2014 - Continues
- KAYIŞ TOPAKSU A., GÖKBULUT G., oğlakçı M., Project Supported by Higher Education Institutions, Nötrino Fiziği Araştırmaları ve Fizik Bölümündeki CMS Merkezinin Yenilenmesi, 2021 - 2023
- KAYIŞ TOPAKSU A., Boran F., Project Supported by Higher Education Institutions, 13 TeV'de Razor değişkenleri kullanılarak itirilmiş top kuark etiketleme yöntemi ile yeni fizik araştırmaları: Ardalan hesaplama, 2018 - 2023
- KAYIŞ TOPAKSU A., Zorbakır İ. S., Project Supported by Higher Education Institutions, 13 TeV'de dijet kütle tesir kesitinin ölçülmesi, 2017 - 2023
- KAYIŞ TOPAKSU A., Kiminsu U., Project Supported by Higher Education Institutions, Measurement of Double-differentia Dijet Mass Cross Sections with the CMS Detector at 13 TeV., 2017 - 2022
- KAYIŞ TOPAKSU A., Project Supported by Higher Education Institutions, CMS Deneyinde yeni fizik araştırmaları (4 adet yayın ile başvuru), 2017 - 2021
- KAYIŞ TOPAKSU A., DOĞAN T., TOPAKSU M., Project Supported by Higher Education Institutions, Erbiyum (Er) Katkılanmış Al<sub>2</sub>O<sub>3</sub> Dozimetrenin Termoluminesans Yöntemi Kullanılarak Doz Cevap Eğrilerinin Analizi, 2017 - 2020
- KAYIŞ TOPAKSU A., Bilican F., Project Supported by Higher Education Institutions, CMS Hadron Kalorimetresinin performans analizleri, 2018 - 2019
- KAYIŞ TOPAKSU A., Uslan E., Project Supported by Higher Education Institutions, CMS deneyinde PF jet tanımlama algoritma performansı ve farklı jet tetikleyiciler için yüklü hadron oranının belirlenmesi, 2018 - 2019
- TOPAKSU M., KAYIŞ TOPAKSU A., PORTAKAL Z. G., AKÇA S., BALCI YEGEN S., YÜKSEL M., DOĞAN T., Project Supported by Higher Education Institutions, International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology (TESNAT2017), 2017 - 2017
- KAYIŞ TOPAKSU A., Project Supported by Higher Education Institutions, CERN'de yapılmakta olan CMS deneyinde yeni fizik araştırmaları (Yayın teşvik), 2016 - 2017
- KAYIŞ TOPAKSU A., Project Supported by Higher Education Institutions, Yayın teşvik (2 yayın), 2015 - 2016
- KAYIŞ TOPAKSU A., Boran F., Project Supported by Higher Education Institutions, CMS Hadronik Kalorimetre Lazer Sisteminin Test Çalışmaları, 2015 - 2015
- KAYIŞ TOPAKSU A., Zorbakır İ. S., Project Supported by Higher Education Institutions, CMS Kalorimetre jetleri için Kule Eşik Değerlerinin Saptanması, 2014 - 2015
- KAYIŞ TOPAKSU A., Kiminsu U., Project Supported by Higher Education Institutions, CMS'de Yenilenen PMT'lerin kazançlarının zamana göre değişimin incelenmesi, 2014 - 2015
- KAYIŞ 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
- KAYIŞ TOPAKSU A., Oğlakçı M., Project Supported by Higher Education Institutions, CMS Kalorimetre jetleri kullanılarak HPD ve SiPM'lerin kalibrasyon faktörlerinin belirlenmesi, 2014 - 2014
- KAYIŞ TOPAKSU A., Project Supported by Higher Education Institutions, LHC'de CMS Deneyinde 7 - 14 TeV Kütle Merkezi Enerjisinde J/? Parçacığı İçeren Dar Rezonansların Araştırılması, 2011 - 2014
- KAYIŞ TOPAKSU A., Project Supported by Higher Education Institutions, CERN'deki CMS Deneyinde Monte Carlo Verileri ile Kalibrasyon Çalışmaları, 2012 - 2013

KAYIŞ TOPAKSU A., GÖKBULUT G., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, CMS Deneyinde Dedektör Kurulumu, Yenilenmesi ve Fizik Çalışmaları, 2010 - 2013

KAYIŞ TOPAKSU A., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, CERN'deki CMS deneyinde ağır iyon çalışmaları, 2004 - 2009

KAYIŞ TOPAKSU A., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, CERN'deki CMS Deneyi için Kullanılacak Optik ve Ölçüm Laboratuvarının 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

## Metrics

Publication: 755

Citation (WoS): 32358

Citation (Scopus): 34817

H-Index (WoS): 74

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)