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### International Researcher IDs

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Publons / Web Of Science ResearcherID: G-2141-2018

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### Education Information

Doctorate, Cukurova University, Fen Edebiyat Fakültesi/ Fen Bilimleri Enstitüsü, Fizik Bölümü/ Fizik Anabilim Dalı, Turkey 2007 - 2014

Masters (Non-Thesis), Cukurova University, Fen Bilimleri Enstitüsü, Ortaöğretim Fen Ve Matematik Alanlar Eğitimi Anabilim Dalı, Ortaöğretim Alan Öğretmenliği (Fizik), Turkey 2006 - 2007

Undergraduate, Cukurova University, Fen Edebiyat Fakültesi/Fen Bilimleri Enstitüsü/, Fizik Bölümü, Turkey 2002 - 2006

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Education Management and Planning, TUBİTAK ARDEB Programı Bilgilendirme ve Proje Önerisi Yazma Uygulamalı Eğitimi, Çukurova Üniversitesi, 2018

Education Management and Planning, COST (TN1302) Financial Management of EU Projects, University Politehnica of Bucharest, 2018

Education Management and Planning, H2020 Financial Management, Vrije University, 2017

Finance, Focused Group Training-Horizon 2020 Legal and Financial Issues, Turkey in Horizon 2020 Project & TÜBİTAK, 2016

Other, Horizon 2020 Intellectual Property Rights Training, Turkey in Horizon 2020 Project & TÜBİTAK, 2016

Education Management and Planning, COST BESTPRAC Meeting - Working Group 2 (Finance), COST BESTPRAC Action, 2016

Education Management and Planning, Turkey in Horizon 2020 Project General Training, Turkey in Horizon 2020 Project & TÜBİTAK, 2016

Education Management and Planning, FP7 and Horizon2020 Master of Finance and Administration, Europa Media Trainings, 2015

Education Management and Planning, CERN- Fermilab Hadron Collider Physics Summer School, CERN (Conseil Européen pour la Recherche Nucléaire), 2013

Education Management and Planning, Beyond the Standard Model: Results with the 7 TeV LHC Collision Data, The Abdus

Salam International Centre for Theoretical Physics, 2011

Education Management and Planning, Physics Analysis Tools Course, CERN (Conseil Européen pour la Recherche Nucléaire), 2011

## Dissertations

Doctorate, MOMENTUM SCALE CALIBRATION OF MUON TRACKS USING THE MUON PAIRS FROM J/Psi DECAYS AND INSTALLATION AND COMMISSIONING WORK IN CMS AT CERN, Cukurova University, Fen Edebiyat, Fizik Bolumu, 2014

## Research Areas

Physics, Basic Particles and Areas, Natural Sciences

## Academic Titles / Tasks

Lecturer PhD, Cukurova University, Rektörlük, Proje Geliştirme Ve Koordinasyon Birimi, 2015 - Continues

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

- I. **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)
- II. **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)
- III. **Observation of the Production of Three Massive Gauge Bosons at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.  
PHYSICAL REVIEW LETTERS, vol.125, no.15, 2020 (SCI-Expanded)
- IV. **Search for a light charged Higgs boson in the H-+/- -> cs channel in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.  
PHYSICAL REVIEW D, vol.102, no.7, 2020 (SCI-Expanded)
- V. **Measurement of CKM matrix elements in single top quark t-channel production in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., Flechl M., et al.  
PHYSICS LETTERS B, vol.808, 2020 (SCI-Expanded)
- VI. **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., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., Flechl M., et al.  
PHYSICS LETTERS B, vol.808, 2020 (SCI-Expanded)
- VII. **Studies of Charm Quark Diffusion inside Jets Using Pb-Pb and pp Collisions at root s(NN)=5.02 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del

Valle A. E., et al.

PHYSICAL REVIEW LETTERS, vol.125, no.10, 2020 (SCI-Expanded)

- VIII. **Combination of the W boson polarization measurements in top quark decays using ATLAS and CMS data at root s=8 TeV**  
Aad G., Abbott B., Abbott D. C., Abud A. A., Abeling K., Abhayasinghe D. K., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2020 (SCI-Expanded)
- IX. **Measurements of  $(t\bar{t})$  over-barH 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.  
PHYSICAL REVIEW LETTERS, vol.125, no.6, 2020 (SCI-Expanded)
- X. **Search for a light pseudoscalar Higgs boson in the boosted mu mu tau tau final state in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2020 (SCI-Expanded)
- XI. **Measurement of the associated production of a Z boson with charm or bottom quark jets in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., Flechl M., et al.  
PHYSICAL REVIEW D, vol.102, no.3, 2020 (SCI-Expanded)
- XII. **Search for resonant pair production of Higgs bosons in the bbZZ channel in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., et al.  
PHYSICAL REVIEW D, vol.102, no.3, 2020 (SCI-Expanded)
- XIII. **Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2020 (SCI-Expanded)
- XIV. **The production of isolated photons in PbPb and pp collisions at root s(NN)=5.02 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2020 (SCI-Expanded)
- XV. **Search for charged Higgs bosons decaying into a top and a bottom quark in the all-jet final state of pp collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2020 (SCI-Expanded)
- XVI. **Measurement of the cross section for  $t(\bar{t})$  over-bar production with additional jets and b jets in pp collisions at root s=13TeV**  
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)
- XVII. **Search for disappearing tracks in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.  
PHYSICS LETTERS B, vol.806, 2020 (SCI-Expanded)
- XVIII. **A measurement of the Higgs boson mass in the diphoton decay channel**

- Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
PHYSICS LETTERS B, vol.805, 2020 (SCI-Expanded)
- XIX. **Search for dijet resonances using events with three jets in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., Fruehwirth R., et al.  
PHYSICS LETTERS B, vol.805, 2020 (SCI-Expanded)
- XX. **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., Eroe J., Del Valle A. E., et al.  
JOURNAL OF INSTRUMENTATION, vol.15, no.6, 2020 (SCI-Expanded)
- XXI. **Measurement of the top quark forward-backward production asymmetry and the anomalous chromoelectric and chromomagnetic moments in in pp collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2020 (SCI-Expanded)
- XXII. **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)
- XXIII. **Determination of the strong coupling constant  $\alpha(S)(m(Z))$  from measurements of inclusive  $W^{+/-}$  and Z boson production cross sections in proton-proton collisions at root s=7 and 8 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2020 (SCI-Expanded)
- XXIV. **Measurement of the cross section for electroweak production of a Z boson, a photon and two jets in proton-proton collisions at root s=13TeV 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)
- XXV. **Strange hadron production in pp and pPb collisions at root(NN)-N-s=5.02 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICAL REVIEW C, vol.101, no.6, 2020 (SCI-Expanded)
- XXVI. **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)
- XXVII. **Measurement of the Jet Mass Distribution and Top Quark Mass in Hadronic Decays of Boosted Top Quarks in pp Collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
PHYSICAL REVIEW LETTERS, vol.124, no.20, 2020 (SCI-Expanded)
- XXVIII. **Calibration of the CMS hadron calorimeters using proton-proton collision data at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.  
JOURNAL OF INSTRUMENTATION, vol.15, no.5, 2020 (SCI-Expanded)
- XXIX. **Search for an excited lepton that decays via a contact interaction to a lepton and two jets in proton-**

**proton collisions at root s=13 TeV**

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

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

- XXX. **Fragmentation of J/psi in jets in pp collisions at root s=5.02 TeV Batoul Diab for the CMS collaboration**  
Diab B., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., et al.  
NUCLEAR PHYSICS A, vol.982, pp.186-188, 2019 (SCI-Expanded)
- XXXI. **Non-Gaussian elliptic-flow fluctuations in PbPb collisions at root S-NN=5.02 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.789, pp.643-665, 2019 (SCI-Expanded)
- XXXII. **Measurement of anisotropic flow in XeXe collisions at 5.44 TeV with the CMS experiment**  
Stojanovic M., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., et al.  
NUCLEAR PHYSICS A, vol.982, pp.395-398, 2019 (SCI-Expanded)
- XXXIII. **Search for the chiral magnetic effect at the LHC with the CMS experiment**  
Tu Z., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., et al.  
NUCLEAR PHYSICS A, vol.982, pp.527-530, 2019 (SCI-Expanded)
- XXXIV. **Beyond nPDFs effects : Prompt J/psi and psi(2S) production in pPb and pp collisions**  
Oh G., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., et al.  
NUCLEAR PHYSICS A, vol.982, pp.743-746, 2019 (SCI-Expanded)
- XXXV. **D-0-Meson R-AA in PbPb Collisions at root s(NN)=5.02 TeV and Elliptic Flow in pPb Collisions at root s(NN)=8.16 TeV with CMS**  
Shi Z., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., et al.  
NUCLEAR PHYSICS A, vol.982, pp.647-650, 2019 (SCI-Expanded)
- XXXVI. **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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2019 (SCI-Expanded)
- XXXVII. **Measurement of differential cross sections for Z boson pair production in association with jets at root s=8 and 13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.  
PHYSICS LETTERS B, vol.789, pp.19-44, 2019 (SCI-Expanded)
- XXXVIII. **Multiparticle correlations and higher order harmonics in pPb collisions at root s(NN)=8.16 TeV**  
Wang Q., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., et al.  
NUCLEAR PHYSICS A, vol.982, pp.375-378, 2019 (SCI-Expanded)
- XXXIX. **Observation of Correlated Azimuthal Anisotropy Fourier Harmonics in pp and p plus Pb Collisions at the LHC**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.9, 2018 (SCI-Expanded)
- XL. **Constraintson the double-parton scattering cross section from same-sign W boson pair production in proton-proton collisions at root s=8TeV**

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

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

- XLII. **Search for Higgsino pair production in pp collisions at  $\sqrt{s}=13$  TeV in final states with large missing transverse momentum and two Higgs bosons decaying via  $H \rightarrow b\bar{b}$**   
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.97, no.3, 2018 (SCI-Expanded)
- XLIII. **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  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW LETTERS, vol.120, no.8, 2018 (SCI-Expanded)
- XLIV. **Search for supersymmetry in events with at least three electrons or muons, jets, and missing transverse momentum in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2018 (SCI-Expanded)
- XLV. **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)
- XLVI. **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)
- XLVII. **Search for supersymmetry in proton-proton collisions at 13 TeV using identified top quarks**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.97, no.1, 2018 (SCI-Expanded)
- XLVIII. **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)
- XLIX. **Particle-flow reconstruction and global event description with the CMS detector**  
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 INSTRUMENTATION, vol.12, 2017 (SCI-Expanded)
- L. **Search for standard model production of four top quarks 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.  
PHYSICS LETTERS B, vol.772, pp.336-358, 2017 (SCI-Expanded)
- LI. **Measurement of the  $t\bar{t}$  production cross section using events with one lepton and at least one jet in pp 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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.9, 2017 (SCI-Expanded)
- LII. **Search for physics beyond the standard model in events with two leptons of same sign, missing transverse momentum, and 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., Brondolin E., Dragicevic M., Eroo J., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.9, 2017 (SCI-Expanded)

LII. **Search for heavy resonances that decay into a vector boson and a Higgs boson in hadronic final states at root  $s=13\text{TeV}$**

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

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.9, 2017 (SCI-Expanded)

LIII. **Search for a heavy resonance decaying to a top quark and a vector-like top quark at root  $s=13\text{TeV}$**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.9, 2017 (SCI-Expanded)

LIV. **Cross section measurement of t-channel single top quark production in pp collisions at root  $s=13\text{TeV}$**

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

PHYSICS LETTERS B, vol.772, pp.752-776, 2017 (SCI-Expanded)

LV. **Search for new phenomena with multiple charged leptons in proton-proton collisions at root  $s=13\text{TeV}$**

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

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.9, 2017 (SCI-Expanded)

LVI. **Search for single production of vector-like quarks decaying into a b quark and a W boson in proton-proton collisions at root  $s=13\text{TeV}$**

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

PHYSICS LETTERS B, vol.772, pp.634-656, 2017 (SCI-Expanded)

LVII. **Search for Low Mass Vector Resonances Decaying to Quark-Antiquark Pairs in Proton-Proton Collisions at root  $s=13\text{TeV}$**

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

PHYSICAL REVIEW LETTERS, vol.119, no.11, 2017 (SCI-Expanded)

LVIII. **Search for high-mass Z gamma resonances in proton-proton collisions at root  $s=8$  and  $13\text{TeV}$  using jet substructure techniques**

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

PHYSICS LETTERS B, vol.772, pp.363-387, 2017 (SCI-Expanded)

LIX. **Measurements of the charm jet cross section and nuclear modification factor in pPb collisions at root  $s_{NN}=5.02\text{TeV}$**

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

PHYSICS LETTERS B, vol.772, pp.306-329, 2017 (SCI-Expanded)

LX. **Coherent J/psi photoproduction in ultra-peripheral PbPb collisions at root  $s_{(NN)}=2.76\text{TeV}$  with the CMS experiment**

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

PHYSICS LETTERS B, vol.772, pp.489-511, 2017 (SCI-Expanded)

LXI. **Searches for W' bosons decaying to a top quark and a bottom quark in proton-proton collisions at  $13\text{TeV}$**

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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- LXII. **Measurement of the inclusive energy spectrum in the very forward direction 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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2017 (SCI-Expanded)
- LXIII. **Search for single production of a heavy vector-like T quark decaying to a Higgs boson and a top quark with a lepton and jets in the final state**  
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.771, pp.80-105, 2017 (SCI-Expanded)
- LXIV. **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)
- LXV. **Search for top quark partners with charge 5/3 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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2017 (SCI-Expanded)
- LXVI. **Measurement of the differential inclusive B+ hadron cross sections 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.  
PHYSICS LETTERS B, vol.771, pp.435-456, 2017 (SCI-Expanded)
- LXVII. **Search for supersymmetry in multijet events with missing transverse momentum in proton-proton collisions at 13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.96, no.3, 2017 (SCI-Expanded)
- LXVIII. **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., 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)
- LXIX. **Suppression of  $\gamma(1S)$ ,  $\gamma(2S)$ , and  $\gamma(3S)$  quarkonium states in PbPb collisions at  $\sqrt{s_{NN}}=2.76$  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.357-379, 2017 (SCI-Expanded)
- LXX. **Search for dark matter produced with an energetic jet or a hadronically decaying W or Z boson 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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2017 (SCI-Expanded)
- LXXI. **Search for  $t(\bar{t})$  resonances in highly boosted lepton plus jets and fully hadronic final states 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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2017 (SCI-Expanded)
- LXXII. **Measurement of the jet mass in highly boosted  $t(\bar{t})$  events from pp collisions at  $\sqrt{s}=8$  TeV**



- Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.7, 2017 (SCI-Expanded)
- LXXIII. **Search for supersymmetry in the all-hadronic final state using top quark tagging in pp collisions at root s=13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.96, no.1, 2017 (SCI-Expanded)
- LXXIV. **Measurement of the cross section for electroweak production of Z gamma in association with two jets and constraints on anomalous quartic gauge couplings 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.  
PHYSICS LETTERS B, vol.770, pp.380-402, 2017 (SCI-Expanded)
- LXXV. **Search for new physics with dijet angular distributions in proton-proton collisions at root S = 13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2017 (SCI-Expanded)
- LXXVI. **Measurement of double-differential cross sections for top quark pair production in pp collisions at root s=8 TeV and impact 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.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.7, 2017 (SCI-Expanded)
- LXXVII. **Pseudorapidity dependence of long-range two-particle correlations in pPb collisions at root sNN=5.02 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW C, vol.96, no.1, 2017 (SCI-Expanded)
- LXXVIII. **Measurement of the mass difference between top quark and antiquark in pp collisions at root 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)
- LXXIX. **Search for third-generation scalar leptoquarks and heavy right-handed neutrinos in final states with two tau leptons and two jets in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2017 (SCI-Expanded)
- LXXX. **Search for heavy gauge W ' bosons in events with an energetic lepton and large missing transverse momentum 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.  
PHYSICS LETTERS B, vol.770, pp.278-301, 2017 (SCI-Expanded)
- LXXXI. **Measurement of inclusive jet cross sections in pp and PbPb collisions at root s(NN)=2.76 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW C, vol.96, no.1, 2017 (SCI-Expanded)
- LXXXII. **Search for associated production of a Z boson with a single top quark and for tZ flavour-changing interactions in pp collisions at root s=8 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J.,

- Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2017 (SCI-Expanded)
- LXXXIII. **Search for supersymmetry in events with photons and missing transverse energy in pp collisions at 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.769, pp.391-412, 2017 (SCI-Expanded)
- LXXXIV. **Search for dijet resonances in proton-proton collisions at root s=13 TeV and constraints on dark matter and other models**  
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.769, pp.520-542, 2017 (SCI-Expanded)
- LXXXV. **Measurement of electroweak-induced production of W gamma with two jets in pp collisions at root s=8TeV and constraints on anomalous quartic gauge couplings**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2017 (SCI-Expanded)
- LXXXVI. **Searches for pair production of third-generation squarks in root s=13 TeV pp collisions**  
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.5, 2017 (SCI-Expanded)
- LXXXVII. **Measurement of differential cross sections for top quark pair production using the lepton plus jets final state in proton-proton collisions at 13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.95, no.9, 2017 (SCI-Expanded)
- LXXXVIII. **Search for single production of vector-like quarks decaying to a Z boson and a top or a bottom quark in proton-proton collisions at root s=13 TeV**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2017 (SCI-Expanded)
- LXXXIX. **Measurement of the top quark mass using single top quark events 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.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.5, 2017 (SCI-Expanded)
- XC. **Multiplicity and rapidity dependence of strange hadron production in pp, pPb, and PbPb collisions at the LHC**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.768, pp.103-129, 2017 (SCI-Expanded)
- XCI. **A search for new phenomena in pp collisions at root s=13TeV in final states with missing transverse momentum and at least one jet using the alpha(T) variable**  
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.5, 2017 (SCI-Expanded)
- XCII. **Search for narrow resonances in dilepton mass spectra in proton-proton collisions at root s=13 TeV and combination with 8 TeV data**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.768, pp.57-80, 2017 (SCI-Expanded)

- XCIII. Observation of gamma(1S) pair production in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2017 (SCI-Expanded)
- XCIV. Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos, and b quarks**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.768, pp.137-162, 2017 (SCI-Expanded)
- XCIV. Search for electroweak production of a vector-like quark decaying to a top quark and a Higgs boson using boosted topologies in fully hadronic final states**  
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2017 (SCI-Expanded)
- XCVI. Measurements of differential production cross sections for a Z boson in association with jets in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2017 (SCI-Expanded)
- XCVII. Relative Modification of Prompt psi(2S) and J/psi Yields from pp to PbPb 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.118, no.16, 2017 (SCI-Expanded)
- XCVIII. Measurement of prompt and nonprompt J/psi production in pp and pPb 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.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.4, 2017 (SCI-Expanded)
- XCIX. Suppression and azimuthal anisotropy of prompt and nonprompt J/psi production in PbPb collisions at root S-NN=2.76 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.4, 2017 (SCI-Expanded)
- C. Charged-particle nuclear modification factors in PbPb and pPb collisions at root s(NN)=5.02 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2017 (SCI-Expanded)
- CI. Mechanical stability of the CMS strip tracker measured with a laser alignment system**  
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 INSTRUMENTATION, vol.12, 2017 (SCI-Expanded)
- CII. Measurement of the WZ production cross section in pp collisions at root s=7 and 8 TeV and search for anomalous triple gauge couplings at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.4, 2017 (SCI-Expanded)
- CIII. Search for high-mass diphoton resonances in proton-proton collisions at 13 TeV and combination with 8 TeV search**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

PHYSICS LETTERS B, vol.767, pp.147-170, 2017 (SCI-Expanded)

- CIV. **Search for top squark pair production in compressed-mass-spectrum scenarios in proton-proton collisions at  $\sqrt{s}=8$  TeV using the  $\alpha(T)$  variable**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.767, pp.403-430, 2017 (SCI-Expanded)
- CV. **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., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2017 (SCI-Expanded)
- CVI. **Search for CP violation in  $t(\bar{t})$  production and decay in proton-proton collisions at  $\sqrt{s}=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2017 (SCI-Expanded)
- CVII. **Search for dark matter and unparticles in events with a Z boson and missing transverse momentum 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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2017 (SCI-Expanded)
- CVIII. **Measurements of differential cross sections for associated production of a W boson and jets in proton-proton collisions at  $\sqrt{s}=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.95, no.5, 2017 (SCI-Expanded)
- CIX. **Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at  $\sqrt{s}=8$  TeV and cross section ratios to 2.76 and 7 TeV**  
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2017 (SCI-Expanded)
- CX. **Observation of Charge-Dependent Azimuthal Correlations in p-Pb Collisions and Its Implication for the Search for the Chiral Magnetic Effect**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.118, no.12, 2017 (SCI-Expanded)
- CXI. **Search for heavy neutrinos or third-generation leptoquarks in final states with two hadronically decaying tau leptons and two jets in proton-proton collisions at  $\sqrt{s}=13$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2017 (SCI-Expanded)
- CXII. **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.  
PHYSICS LETTERS B, vol.766, pp.268-290, 2017 (SCI-Expanded)
- CXIII. **Measurement of the  $t(\bar{t})$  production cross section using events in the  $e\mu$  final state in pp collisions at  $\sqrt{s}=13$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.3, 2017 (SCI-Expanded)
- CXIV. **Search for massive resonances decaying in to WW,WZ or ZZ bosons in proton-proton collisions at**

**root s=13 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2017 (SCI-Expanded)

- CXV. **Jet energy scale and resolution in the CMS experiment in pp collisions at 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF INSTRUMENTATION, vol.12, 2017 (SCI-Expanded)
- CXVI. **Measurement of the transverse momentum spectra of weak vector bosons produced in proton-proton collisions at root s=8TeV**  
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2017 (SCI-Expanded)
- CXVII. **Search for anomalous Wtb couplings and flavour-changing neutral currents in t-channel single top quark production in pp collisions at root s=7 and 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2017 (SCI-Expanded)
- CXVIII. **Search for top quark decays via Higgs-boson-mediated flavor-changing neutral currents in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2017 (SCI-Expanded)
- CXIX. **Measurement of the production cross section of a W boson in association with two b jets in pp collisions at root s=8TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.2, 2017 (SCI-Expanded)
- CXX. **Searches for invisible decays of the Higgs boson in pp collisions at root S=7, 8, and 13 TeV**  
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2017 (SCI-Expanded)
- CXXI. **Evidence for collectivity in pp collisions at the LHC**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.765, pp.193-220, 2017 (SCI-Expanded)
- CXXII. **Search for heavy resonances decaying to tau lepton pairs in proton-proton collisions at root s=13 TeV**  
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2017 (SCI-Expanded)
- CXXIII. **Observation of the decay B+ -> psi(2S)phi(1020)K+ in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.764, pp.66-86, 2017 (SCI-Expanded)
- CXXIV. **Search for R-parity violating supersymmetry with displaced vertices in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW D, vol.95, no.1, 2017 (SCI-Expanded)
- CXXV. **Measurements of the t(t)over-bar production cross section in lepton plus jets final states in pp**

**collisions at 8 and ratio of 8 to 7 cross sections**

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

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.1, pp.1-27, 2017 (SCI-Expanded)

**CXXVI. Inclusive search for supersymmetry using razor variables in pp collisions at root s=13 TeV**

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

PHYSICAL REVIEW D, vol.95, no.1, 2017 (SCI-Expanded)

**CXXVII. Search for high-mass Z gamma resonances in e(+)e(-)gamma and mu(+)mu(-)gamma final states in proton-proton collisions at root s=8 and 13 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2017 (SCI-Expanded)

**CXXVIII. Search for supersymmetry in events with one lepton and multiple jets in proton-proton collisions at root s=13 TeV**

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

PHYSICAL REVIEW D, vol.95, no.1, 2017 (SCI-Expanded)

**CXXIX. The CMS trigger system**

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

JOURNAL OF INSTRUMENTATION, vol.12, 2017 (SCI-Expanded)

**CXXX. Search for Dark Matter and Supersymmetry with a Compressed Mass Spectrum in the Vector Boson Fusion Topology in Proton-Proton Collisions at root s=8 TeV**

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

PHYSICAL REVIEW LETTERS, vol.118, no.2, 2017 (SCI-Expanded)

**CXXXI. Search for dark matter particles in proton-proton collisions at root s = 8 TeV using the razor variables**

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

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

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

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

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

**CXXXIII. Search for lepton flavour violating decays of the Higgs boson to e tau and e mu in proton-proton collisions at root s=8 TeV**

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

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

**CXXXIV. Searches for R-parity-violating supersymmetry in pp collisions at root s=8 TeV in final states with 0-4 leptons**

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

PHYSICAL REVIEW D, vol.94, no.11, 2016 (SCI-Expanded)

**CXXXV. Studies of inclusive four-jet production with two b-tagged jets in proton-proton collisions at 7 TeV**

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

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- CXXXVI. **Measurement of the ZZ production cross section and  $Z \rightarrow l^{(+)}l^{(-)}l'^{(+)}l'^{-}$  branching fraction in pp 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.  
 PHYSICS LETTERS B, vol.763, pp.280-303, 2016 (SCI-Expanded)
- CXXXVII. **Search for long-lived charged particles in proton-proton collisions at root s=13 TeV**  
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 PHYSICAL REVIEW D, vol.94, no.11, 2016 (SCI-Expanded)
- CXXXVIII. **Search for dark matter in proton-proton collisions at 8 TeV with missing transverse momentum and vector boson tagged jets**  
 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.12, 2016 (SCI-Expanded)
- CXXXIX. **Measurement of the mass of the top quark in decays with a J/psi meson in pp collisions 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.12, 2016 (SCI-Expanded)
- CXL. **Measurement of the W boson helicity fractions in the decays of top quark pairs to lepton plus jets final states produced in pp collisions at root s=8 TeV**  
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 PHYSICS LETTERS B, vol.762, pp.512-534, 2016 (SCI-Expanded)
- CXLI. **Measurement of electroweak production of a W boson and two forward jets in proton-proton collisions at root s=8 TeV**  
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2016 (SCI-Expanded)
- CXLII. **Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at root s(NN)=2.76 TeV**  
 Ruiz Vargas J. C., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2016 (SCI-Expanded)
- CXLIII. **Measurement of the integrated and differential  $t(\bar{t})$  production cross sections for high-p(T) top quarks in pp collisions at root s=8 TeV**  
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 PHYSICAL REVIEW D, vol.94, no.7, 2016 (SCI-Expanded)
- CXLIV. **Search for new physics with the M-T2 variable in all-jets final states produced in pp collisions at root s=13 Tev**  
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2016 (SCI-Expanded)
- CXLV. **Upsilon (nS) polarizations versus particle multiplicity in pp collisions at root s=7 TeV**  
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
 PHYSICS LETTERS B, vol.761, pp.31-52, 2016 (SCI-Expanded)
- CXLVI. **Phenomenological MSSM interpretation of CMS searches in pp collisions at root s=7 and 8 TeV**  
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
 JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2016 (SCI-Expanded)

- CXLVII. **Dose rate effects in the radiation damage of the plastic scintillators of the CMS hadron endcap calorimeter**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Litomin A., Mossolov V., Shumeiko N., Van de Klundert M., Van Haeevermaet H., Van Mechelen P., Van Spilbeek A., et al.  
JOURNAL OF INSTRUMENTATION, vol.11, 2016 (SCI-Expanded)
- CXLVIII. **Search for s channel single top quark production in pp collisions at root s=7 and 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.9, 2016 (SCI-Expanded)
- CXLIX. **Search for two Higgs bosons in final states containing two photons and two bottom quarks in proton-proton collisions at 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.94, no.5, 2016 (SCI-Expanded)
- CL. **Measurement of the differential cross sections for top quark pair production as a function of kinematic event variables in pp collisions at root s=7 and 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.94, no.5, 2016 (SCI-Expanded)
- CLI. **Measurement of the Z gamma -> nu(nu)over-bar gamma production cross section in pp collisions at root s=8 TeV and limits on anomalous ZZ gamma and Z gamma gamma trilinear gauge boson couplings**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.760, pp.448-468, 2016 (SCI-Expanded)
- CLII. **Measurement of dijet azimuthal decorrelation in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.10, 2016 (SCI-Expanded)
- CLIII. **Search for Higgs boson off-shell production in proton-proton collisions at 7 and 8 TeV and derivation of constraints on its total decay width**  
POLATÖZ A., EŞKUT E., GÖKBULUT G.  
JOURNAL OF HIGH ENERGY PHYSICS, vol.9, no.51, pp.1-25, 2016 (SCI-Expanded)
- CLIV. **Search for R-parity violating decays of a top squark in proton-proton collisions at root s=8TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.760, pp.178-201, 2016 (SCI-Expanded)
- CLV. **Measurements of t(t)over-bar charge asymmetry using dilepton final states in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.760, pp.365-386, 2016 (SCI-Expanded)
- CLVI. **Search for supersymmetry in electroweak production with photons and large missing transverse energy in pp collisions at root s=8TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.759, pp.479-500, 2016 (SCI-Expanded)
- CLVII. **Search for new physics in same-sign dilepton events in proton-proton collisions at root s=13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.8, 2016 (SCI-Expanded)



- CLVIII. **Measurement of the double-differential inclusive jet cross section in proton-proton collisions at root  $s=13\text{TeV}$**   
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.8, 2016 (SCI-Expanded)
- CLIX. **Combined search for anomalous pseudoscalar HW couplings in  $VH(H \rightarrow b\bar{b})$  production and  $H \rightarrow VV$  decay**  
Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., Friedl M., Fruhwirth R., et al.  
PHYSICS LETTERS B, vol.759, pp.672-696, 2016 (SCI-Expanded)
- CLX. **Measurement of the differential cross section and charge asymmetry for inclusive  $pp \rightarrow W^{+/-} + X$  production at root  $s=8\text{ TeV}$**   
Khachatryan V. y., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.8, 2016 (SCI-Expanded)
- CLXI. **Search for direct pair production of supersymmetric top quarks decaying to all-hadronic final states in pp collisions at root  $s=8\text{ TeV}$**   
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.8, 2016 (SCI-Expanded)
- CLXII. **Search for supersymmetry in pp collisions at root  $s=13\text{ TeV}$  in the single-lepton final state using the sum of masses of large-radius jets**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2016 (SCI-Expanded)
- CLXIII. **Search for supersymmetry in events with soft leptons, low jet multiplicity, and missing transverse energy in proton-proton collisions at root  $s=8\text{ TeV}$**   
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.759, pp.9-35, 2016 (SCI-Expanded)
- CLXIV. **Evidence for exclusive  $\gamma\gamma \rightarrow W^{(+)}W^{(-)}$  production and constraints on anomalous quartic gauge couplings in pp collisions at and  $8\text{ TeV}$**   
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2016 (SCI-Expanded)
- CLXV. **Study of Z boson production in pPb collisions at root  $S_{NN}=5.02\text{ TeV}$**   
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.759, pp.36-57, 2016 (SCI-Expanded)
- CLXVI. **Measurement of the inelastic cross section in proton-lead collisions at root  $s_{NN}=5.02\text{ TeV}$**   
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.759, pp.641-662, 2016 (SCI-Expanded)
- CLXVII. **Search for neutral resonances decaying into a Z boson and a pair of b jets or tau leptons**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICS LETTERS B, vol.759, pp.369-394, 2016 (SCI-Expanded)
- CLXVIII. **Measurement of the  $t\bar{t}$  production cross section in the  $e\mu$  channel in proton-proton collisions at root  $s=7$  and  $8\text{ TeV}$**   
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2016 (SCI-Expanded)

- CLXIX. **Search for Narrow Resonances in Dijet Final States at root  $s=8$  TeV with the Novel CMS Technique of Data Scouting**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.117, no.3, 2016 (SCI-Expanded)
- CLXX. **Search for heavy resonances decaying to two Higgs bosons in final states containing four b quarks**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.7, 2016 (SCI-Expanded)
- CLXXI. **Search for Resonant Production of High-Mass Photon Pairs in Proton-Proton Collisions at root  $s=8$  and 13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW LETTERS, vol.117, no.5, 2016 (SCI-Expanded)
- CLXXII. **Search for direct pair production of scalar top quarks in the single- and dilepton channels 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.7, 2016 (SCI-Expanded)
- CLXXIII. **Search for supersymmetry in the multijet and missing transverse momentum final state in pp collisions at 13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.758, pp.152-180, 2016 (SCI-Expanded)
- CLXXIV. **Search for a low-mass pseudoscalar Higgs boson produced in association with a  $b(\bar{b})$  pair in pp collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.758, pp.296-320, 2016 (SCI-Expanded)
- CLXXV. **Measurement of  $t(\bar{t})$  production with additional jet activity, including b quark jets, in the dilepton decay channel using pp collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.7, 2016 (SCI-Expanded)
- CLXXVI. **Measurement of inclusive jet production and nuclear modifications in pPb collisions at root  $s(NN)=5.02$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.7, 2016 (SCI-Expanded)
- CLXXVII. **Measurement of spin correlations in  $t\bar{t}$  production using the matrix element method in the muon plus jets final state in pp collisions at root  $S=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.758, pp.321-346, 2016 (SCI-Expanded)
- CLXXVIII. **Measurement of the  $W+W^-$  cross section in pp collisions at root  $s=8$  TeV and limits on anomalous gauge couplings**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.7, 2016 (SCI-Expanded)
- CLXXIX. **Forward-backward asymmetry of Drell-Yan lepton pairs in pp collisions at root  $s=8$  TeV**

- Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.6, 2016 (SCI-Expanded)
- CLXXX. **Search for lepton flavour violating decays of heavy resonances and quantum black holes to an  $e\mu$  pair in proton-proton collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.6, 2016 (SCI-Expanded)
- CLXXXI. **Search for pair-produced vectorlike B quarks in proton-proton collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
PHYSICAL REVIEW D, vol.93, no.11, 2016 (SCI-Expanded)
- CLXXXII. **Inclusive and differential measurements of the  $t(\bar{t})$  charge asymmetry in pp collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
PHYSICS LETTERS B, vol.757, pp.154-179, 2016 (SCI-Expanded)
- CLXXXIII. **Measurement of the CP-violating weak phase  $\phi(s)$  and the decay width difference  $\Delta\Gamma(s)$  using the  $B\text{-}s(0) \rightarrow J/\psi\phi(1020)$  decay channel in pp collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
PHYSICS LETTERS B, vol.757, pp.97-120, 2016 (SCI-Expanded)
- CLXXXIV. **Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in pp collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
PHYSICS LETTERS B, vol.757, pp.6-31, 2016 (SCI-Expanded)
- CLXXXV. **Measurement of the inclusive jet cross section in pp collisions at root  $s=2.76$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.5, 2016 (SCI-Expanded)
- CLXXXVI. **Measurement of the ratio  $B(B\text{-}s(0) \rightarrow J/\psi f(0)(980))/B(B\text{-}s(0) \rightarrow J/\psi\phi(1020))$  in pp collisions at root  $s=7$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Friedl M., Fruehwirth R., Ghete V. M., et al  
PHYSICS LETTERS B, vol.756, pp.84-102, 2016 (SCI-Expanded)
- CLXXXVII. **Measurement of the top quark mass using charged particles in pp collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
PHYSICAL REVIEW D, vol.93, no.9, 2016 (SCI-Expanded)
- CLXXXVIII. **Search for supersymmetry in pp collisions at root  $s=8$  TeV in final states with boosted W bosons and b jets using razor variables**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
PHYSICAL REVIEW D, vol.93, no.9, 2016 (SCI-Expanded)
- CLXXXIX. **Search for anomalous single top quark production in association with a photon in pp collisions at root  $s=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2016 (SCI-Expanded)
- CXC. **Search for massive WH resonances decaying into the  $l\nu b(\bar{b})$  final state at root  $s=8$  TeV**

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

EUROPEAN PHYSICAL JOURNAL C, vol.76, no.5, 2016 (SCI-Expanded)

- CXCI. **Measurement of top quark polarisation in t-channel single top quark production**  
The CMS collaboration C., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2016 (SCI-Expanded)
- CXCII. **Searches for a heavy scalar boson H decaying to a pair of 125 GeV Higgs bosons hh or for a heavy pseudoscalar boson A decaying to Zh, in the final states with h -> tau tau**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICS LETTERS B, vol.755, pp.217-244, 2016 (SCI-Expanded)
- CXCIII. **Search for W ' decaying to tau lepton and neutrino in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICS LETTERS B, vol.755, pp.196-216, 2016 (SCI-Expanded)
- CXCIV. **Search for new phenomena in monophoton final states in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Friedl M., Fruehwirth R., Ghete V. M., et al.  
PHYSICS LETTERS B, vol.755, pp.102-124, 2016 (SCI-Expanded)
- CXCV. **Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at root s=7 and 8 TeV**  
The CMS collaboration C., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2016 (SCI-Expanded)
- CXCVI. **Measurement of the top quark mass using proton-proton data at root(s)=7**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICAL REVIEW D, vol.93, no.7, 2016 (SCI-Expanded)
- CXCVII. **Measurement of Long-Range Near-Side Two-Particle Angular Correlations in pp Collisions at root s=13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICAL REVIEW LETTERS, vol.116, no.17, 2016 (SCI-Expanded)
- CXCVIII. **Search for heavy Majorana neutrinos in e(+/-)e(+/-)+ jets and e(+/-) mu(+/-) + jetseveninproton-protoncollisionsat root s=8TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2016 (SCI-Expanded)
- CXCIX. **Search for dark matter and unparticles produced in association with a Z boson in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICAL REVIEW D, vol.93, no.5, 2016 (SCI-Expanded)
- CC. **Measurements of t(t)over-bar spin correlations and top quark polarization using dilepton final states in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICAL REVIEW D, vol.93, no.5, 2016 (SCI-Expanded)
- CCI. **Measurement of the t(t)over-bar production cross section in the all-jets final state in pp collisions at root s=8TeV**

- Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.3, 2016 (SCI-Expanded)
- CCII. **Search for excited leptons in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2016 (SCI-Expanded)
- CCIII. **Transverse momentum spectra of inclusive b jets in pPb collisions atv root s(NN)=5.02 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.754, pp.59-80, 2016 (SCI-Expanded)
- CCIV. **Event generator tunes obtained from underlying event and multiparton scattering measurements**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.3, 2016 (SCI-Expanded)
- CCV. **Correlations between jets and charged particles in PbPb and pp collisions at root s(NN)=2.76 TeV**  
The CMS collaboration C., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2016 (SCI-Expanded)
- CCVI. **Search for exotic decays of a Higgs boson into undetectable particles and one or more photons**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.753, pp.363-388, 2016 (SCI-Expanded)
- CCVII. **Angular analysis of the decay  $B-0 \rightarrow K^*(0)\mu(+)\mu(-)$  from pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICS LETTERS B, vol.753, pp.424-448, 2016 (SCI-Expanded)
- CCVIII. **Search for pair production of first and second generation leptoquarks in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.93, no.3, 2016 (SCI-Expanded)
- CCIX. **Search for Narrow Resonances Decaying to Dijets in Proton-Proton Collisions at root s=13 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW LETTERS, vol.116, no.7, 2016 (SCI-Expanded)
- CCX. **Search for single production of scalar leptoquarks in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW D, vol.93, no.3, 2016 (SCI-Expanded)
- CCXI. **Search for a massive resonance decaying into a Higgs boson and a W or Z boson in hadronic final states in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Flechl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2016 (SCI-Expanded)
- CCXII. **Search for  $W^- \rightarrow tb$  in proton-proton collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2016 (SCI-Expanded)
- CCXIII. **Measurement of the Top Quark Pair Production Cross Section in Proton-Proton Collisions at root s=13 TeV**

- Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICAL REVIEW LETTERS, vol.116, no.5, 2016 (SCI-Expanded)
- CCXIV. **Measurement of the charge asymmetry in top quark pair production in pp collisions at root s=8 TeV using a template method**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICAL REVIEW D, vol.93, no.3, 2016 (SCI-Expanded)
- CCXV. **Search for a Higgs boson decaying into  $\gamma^*\gamma \rightarrow \ell\ell$  with low dilepton mass in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICS LETTERS B, vol.753, pp.341-362, 2016 (SCI-Expanded)
- CCXVI. **Search for neutral MSSM Higgs bosons decaying to  $\mu^+\mu^-$  in pp collisions at root s=7 and 8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICS LETTERS B, vol.752, pp.221-246, 2016 (SCI-Expanded)
- CCXVII. **A search for pair production of new light bosons decaying into muons**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICS LETTERS B, vol.752, pp.146-168, 2016 (SCI-Expanded)
- CCXVIII. **Observation of top quark pairs produced in association with a vector boson in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2016 (SCI-Expanded)
- CCXIX. **Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at root s(NN)=2.76 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2016 (SCI-Expanded)
- CCXX. **Study of B Meson Production in p plus Pb Collisions at root s(NN)=5.02 TeV Using Exclusive Hadronic Decays**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
PHYSICAL REVIEW LETTERS, vol.116, no.3, 2016 (SCI-Expanded)
- CCXXI. **Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at root s=8TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.1, 2016 (SCI-Expanded)
- CCXXII. **Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into tau leptons in pp collisions at root s=8TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2016 (SCI-Expanded)
- CCXXIII. **Reconstruction and identification of tau lepton decays to hadrons and  $\nu(\tau)$  at CMS**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.  
JOURNAL OF INSTRUMENTATION, vol.11, 2016 (SCI-Expanded)

- CCXXIV. **Search for the production of an excited bottom quark decaying to  $tW$  in proton-proton collisions at  $\sqrt{s}=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2016 (SCI-Expanded)
- CCXXV. **Search for resonant  $t(\bar{t})$  production in proton-proton collisions at  $\sqrt{s}=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.93, no.1, 2016 (SCI-Expanded)
- CCXXVI. **Search for vectorlike charge  $2/3$  T quarks in proton-proton collisions at  $\sqrt{s}=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.93, no.1, 2016 (SCI-Expanded)
- CCXXVII. **Production of leading charged particles and leading charged-particle jets at small transverse momenta in pp collisions at  $\sqrt{s}=8$  TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Friedl M., Fruehwirth R., Ghete V. M., et al.  
PHYSICAL REVIEW D, vol.92, no.11, 2015 (SCI-Expanded)
- CCXXVIII. **Search for a light charged Higgs boson decaying to  $c(\bar{c})$  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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2015 (SCI-Expanded)
- CCXXIX. **Pseudorapidity distribution of charged hadrons in proton-proton 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.  
PHYSICS LETTERS B, vol.751, pp.143-163, 2015 (SCI-Expanded)
- CCXXX. **Measurement of the differential cross section for top quark pair production in pp collisions at  $\sqrt{s}=8$ TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Friedl M., Fruehwirth R., Ghete V. M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.75, no.11, 2015 (SCI-Expanded)
- CCXXXI. **Angular coefficients of Z bosons produced in pp collisions at  $\sqrt{s}=8$  TeV and decaying to  $\mu^{+}\mu^{-}$  as a function of transverse momentum and rapidity**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Friedl M., Fruehwirth R., Ghete V. M., et al.  
PHYSICS LETTERS B, vol.750, pp.154-175, 2015 (SCI-Expanded)
- CCXXXII. **Search for a charged Higgs boson 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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2015 (SCI-Expanded)
- CCXXXIII. **Search for diphoton resonances in the mass range from 150 to 850 GeV 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.  
PHYSICS LETTERS B, vol.750, pp.494-519, 2015 (SCI-Expanded)
- CCXXXIV. **Search for supersymmetry in the vector-boson fusion topology in proton-proton collisions at  $\sqrt{s}=8$ TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2015 (SCI-Expanded)
- CCXXXV. **Study of W boson production in pPb collisions at  $\sqrt{NN}-S=5.02$  TeV**

- Adam W., Bergauer T., Dragicevic M., Eroe J., Friedl M., Fruehwirth R., Ghete V. M., Hartl C., Hoermann N., Hrubec J., et al.  
PHYSICS LETTERS B, vol.750, pp.565-586, 2015 (SCI-Expanded)
- CCXXXVI. **Search for neutral MSSM Higgs bosons decaying into a pair of bottom quarks**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.11, pp.1-43, 2015 (SCI-Expanded)
- CCXXXVII. **Search for a Higgs boson in the mass range from 145 to 1000 GeV decaying to a pair of W or Z bosons**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2015 (SCI-Expanded)
- CCXXXVIII. **Limits on the Higgs boson lifetime and width from its decay to four charged leptons**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
PHYSICAL REVIEW D, vol.92, no.7, 2015 (SCI-Expanded)
- CCXXXIX. **Comparison of the Z/gamma\* plus jets to gamma plus jets cross sections in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2015 (SCI-Expanded)
- CCXL. **Search for supersymmetry with photons in pp collisions at root s=8 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.  
PHYSICAL REVIEW D, vol.92, no.7, 2015 (SCI-Expanded)
- CCXLI. **Measurements of the ZZ production cross sections in the 2l2 nu channel in proton-proton collisions at root s=7 and 8 TeV and combined constraints on triple gauge couplings**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Friedl M., Fruehwirth R., Ghete V. M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.75, no.10, 2015 (SCI-Expanded)
- CCXLII. **Angular analysis and branching fraction measurement of the decay B-0 -> K\*(0)mu(+)mu(-)**  
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.727, pp.77-100, 2013 (SCI-Expanded)
- CCXLIII. **Searches for new physics using the t(t)over-bar invariant mass distribution in pp collisions at root 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.  
PHYSICAL REVIEW LETTERS, vol.111, no.21, 2013 (SCI-Expanded)
- CCXLIV. **Measurement of the Upsilon(1S), Upsilon(2S), and Upsilon(3S) cross sections 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.  
PHYSICS LETTERS B, vol.727, pp.101-125, 2013 (SCI-Expanded)
- CCXLV. **The performance of the CMS muon detector in proton-proton collisions at root s=7 TeV at the LHC**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.  
JOURNAL OF INSTRUMENTATION, vol.8, 2013 (SCI-Expanded)
- CCXLVI. **Search for a non-standard-model Higgs boson decaying to a pair of new light bosons in four-muon final states**  
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.726, pp.564-586, 2013 (SCI-Expanded)
- CCXLVII. **Search for a new bottomonium state decaying to Upsilon(1S)pi(+)pi(-) in pp collisions at root s=8 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.727, pp.57-76, 2013 (SCI-Expanded)
- CCXLVIII. **Search for a Higgs boson decaying into a Z and a photon in pp collisions at root s=7 and 8 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.726, pp.587-609, 2013 (SCI-Expanded)
- CCXLIX. **Measurement of the W-boson helicity in top-quark decays from t(t)over-bar production in lepton plus jets events in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2013 (SCI-Expanded)
- CCL. **Measurement of the ratio of the inclusive 3-jet cross section to the inclusive 2-jet cross section in pp collisions at root s=7 TeV and first determination of the strong coupling constant in the TeV range**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.73, no.10, 2013 (SCI-Expanded)
- CCLI. **Measurement of the production cross section for Z gamma -> nu(nu)over-bar gamma in pp collisions at root s=7 TeV and limits on ZZ gamma and Z gamma gamma triple gauge boson couplings**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2013 (SCI-Expanded)
- CCLII. **Measurement of the hadronic activity in events with a Z and two jets and extraction of the cross section for the electroweak production of a Z with two jets in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2013 (SCI-Expanded)
- CCLIII. **Measurement of the W+W- cross section in pp collisions at and limits on anomalous WW gamma and WWZ couplings**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.73, no.10, 2013 (SCI-Expanded)
- CCLIV. **Search for gluino mediated bottom- and top-squark production in multijet final states in pp collisions at 8 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.725, pp.243-270, 2013 (SCI-Expanded)
- CCLV. **Energy calibration and resolution of the CMS electromagnetic calorimeter in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
JOURNAL OF INSTRUMENTATION, vol.8, 2013 (SCI-Expanded)
- CCLVI. **Search for supersymmetry in hadronic final states with missing transverse energy using the variables alpha(T) and b-quark multiplicity in pp collisions at root s=8 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.

- EUROPEAN PHYSICAL JOURNAL C, vol.73, no.9, 2013 (SCI-Expanded)
- CCLVII. **Measurement of neutral strange particle production in the underlying event in proton-proton collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW D, vol.88, no.5, 2013 (SCI-Expanded)
- CCLVIII. **Measurement of the  $B\text{-}s(0) \rightarrow \mu^{+}\mu^{-}$  Branching Fraction and Search for  $B\text{-}0 \rightarrow \mu^{+}\mu^{-}$  with the CMS Experiment**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW LETTERS, vol.111, no.10, 2013 (SCI-Expanded)
- CCLIX. **Interpretation of searches for supersymmetry with simplified models**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroë J., Fabjan C., et al.  
PHYSICAL REVIEW D, vol.88, no.5, 2013 (SCI-Expanded)
- CCLX. **Searches for Higgs bosons in pp collisions at  $\sqrt{s}=7$  and 8 TeV in the context of four-generation and fermiophobic models**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroë J., Fabjan C., et al.  
PHYSICS LETTERS B, vol.725, pp.36-59, 2013 (SCI-Expanded)
- CCLXI. **Inclusive Search for Supersymmetry Using Razor Variables in pp Collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroë J., Fabjan C., et al.  
PHYSICAL REVIEW LETTERS, vol.111, no.8, 2013 (SCI-Expanded)
- CCLXII. **Study of exclusive two-photon production of  $W^{+}W^{-}$  in pp collisions at  $\sqrt{s}=7$  TeV and constraints on anomalous quartic gauge couplings**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2013 (SCI-Expanded)
- CCLXIII. **Search for microscopic black holes in pp collisions at  $\sqrt{s}=8$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2013 (SCI-Expanded)
- CCLXIV. **Measurement of masses in the  $t(\tilde{t})$  system by kinematic endpoints in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.73, no.7, 2013 (SCI-Expanded)
- CCLXV. **Search for physics beyond the standard model in events with tau leptons, jets, and large transverse momentum imbalance in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroë J., Fabjan C., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.73, no.7, 2013 (SCI-Expanded)
- CCLXVI. **Searches for long-lived charged particles in pp collisions at  $\sqrt{s}=7$  and 8 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2013 (SCI-Expanded)
- CCLXVII. **Multiplicity and transverse momentum dependence of two- and four-particle correlations in pPb and PbPb collisions**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroë J., Fabjan C., Friedl M., et al.

- PHYSICS LETTERS B, vol.724, pp.213-240, 2013 (SCI-Expanded)
- CCLXVIII. **Measurement of the  $\Lambda(0)(b)$  lifetime in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2013 (SCI-Expanded)
- CCLXIX. **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)
- CCLXX. **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)
- CCLXXI. **Measurements of differential jet cross sections in proton-proton collisions at  $\sqrt{s}=7$  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)
- CCLXXII. **Search for narrow resonances using the dijet mass spectrum in pp collisions at  $\sqrt{s}=8$  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)
- CCLXXIII. **Observation of a new boson with mass near 125 GeV in pp collisions at  $\sqrt{s}=7$  and 8 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2013 (SCI-Expanded)
- CCLXXIV. **Search for supersymmetry in pp collisions at  $\sqrt{s}=7$  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., Eroe J., Fabjan C., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.73, no.5, 2013 (SCI-Expanded)
- CCLXXV. **Search for long-lived particles in events with photons and missing energy in proton-proton collisions at  $\sqrt{s}=7$  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)
- CCLXXVI. **Measurement of the  $t(\bar{t})$  production cross section in the all-jet final state in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2013 (SCI-Expanded)
- CCLXXVII. **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., Eroe J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2013 (SCI-Expanded)
- CCLXXVIII. **Search for fractionally charged particles in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.  
PHYSICAL REVIEW D, vol.87, no.9, 2013 (SCI-Expanded)
- CCLXXIX. **Search for anomalous production of highly boosted Z bosons decaying to  $\mu(+)\mu(-)$  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., Eroev J., Fabjan C., et al.

PHYSICS LETTERS B, vol.722, pp.28-47, 2013 (SCI-Expanded)

**CCLXXX. Measurement of the inelastic proton-proton cross section at root s=7 TeV**

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

PHYSICS LETTERS B, vol.722, pp.5-27, 2013 (SCI-Expanded)

**CCLXXXI. Event shapes and azimuthal correlations in Z plus jets 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., Eroev J., Fabjan C., et al.

PHYSICS LETTERS B, vol.722, pp.238-261, 2013 (SCI-Expanded)

**CCLXXXII. 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., Eroev J., Fabjan C., et al.

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

**:CLXXXIII. Studies of jet mass in dijet and W/Z plus jet events**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2013 (SCI-Expanded)

**:CLXXXIV. Search for supersymmetry in events with opposite-sign dileptons and missing transverse energy using an artificial neural network**

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

PHYSICAL REVIEW D, vol.87, no.7, 2013 (SCI-Expanded)

**CCLXXXV. Measurement of the t(t)-bar production cross section in the tau plus jets channel in pp collisions at root s=7 TeV**

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

EUROPEAN PHYSICAL JOURNAL C, vol.73, no.4, 2013 (SCI-Expanded)

**:CLXXXVI. Measurement of the W+W- and ZZ production cross sections 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., Eroev J., Fabjan C., et al.

PHYSICS LETTERS B, vol.721, pp.190-211, 2013 (SCI-Expanded)

**CLXXXVII. Identification of b-quark jets with the CMS experiment**

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

JOURNAL OF INSTRUMENTATION, vol.8, 2013 (SCI-Expanded)

**:LXXXVIII. Search for pair-produced dijet resonances in four-jet final states in pp collisions at root s=7 TeV**

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

PHYSICAL REVIEW LETTERS, vol.110, no.14, 2013 (SCI-Expanded)

**:CLXXXIX. Study of the underlying event at forward rapidity in pp collisions at root s=0.9, 2.76, and 7 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2013 (SCI-Expanded)

**CCXC. 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., Eroev J., Fabjan C., et al.

- PHYSICAL REVIEW LETTERS, vol.110, no.17, 2013 (SCI-Expanded)
- CCXCI. **Search for new physics in final states with a lepton and missing transverse energy in pp collisions at the LHC**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.  
PHYSICAL REVIEW D, vol.87, no.7, 2013 (SCI-Expanded)
- CCXCII. **Measurement of the X(3872) production cross section via decays to J/psi pi(+)pi(-) 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., Ero J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2013 (SCI-Expanded)
- CCXCIII. **Search for Z' resonances decaying to t(t)over-bar in dilepton plus jets final states in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.  
PHYSICAL REVIEW D, vol.87, no.7, 2013 (SCI-Expanded)
- CCXCIV. **Search for supersymmetry in final states with a single lepton, b-quark jets, and missing transverse 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.  
PHYSICAL REVIEW D, vol.87, no.5, 2013 (SCI-Expanded)
- CCXCV. **Measurement of the t(t)over-bar production cross section in pp collisions at root s=7 TeV with lepton plus jets final states**  
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.720, pp.83-104, 2013 (SCI-Expanded)
- CCXCVI. **Search for new physics in events with same-sign dileptons and b jets 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.  
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2013 (SCI-Expanded)
- CCXCVII. **Measurement of differential top-quark-pair production cross sections 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.  
EUROPEAN PHYSICAL JOURNAL C, vol.73, no.3, 2013 (SCI-Expanded)
- CCXCVIII. **Search for heavy narrow dilepton resonances in pp collisions at root s=7 TeV and 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.  
PHYSICS LETTERS B, vol.720, pp.63-82, 2013 (SCI-Expanded)
- CCXCIX. **Search for contact interactions using the inclusive jet p(T) spectrum 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 D, vol.87, no.5, 2013 (SCI-Expanded)
- CCC. **Search for excited leptons 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.  
PHYSICS LETTERS B, vol.720, pp.309-329, 2013 (SCI-Expanded)
- CCCI. **Search for new physics in events with photons, jets, and missing transverse energy in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.

- JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2013 (SCI-Expanded)
- CCCII. **Search for exotic resonances decaying into WZ/ZZ in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2013 (SCI-Expanded)
- CCCIII. **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., Eroe J., Fabjan C., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.73, no.2, 2013 (SCI-Expanded)
- CCCIV. **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., Eroe J., Fabjan C., et al.  
PHYSICAL REVIEW LETTERS, vol.110, no.8, 2013 (SCI-Expanded)
- CCCIV. **Search in leptonic channels for heavy resonances decaying to long-lived neutral particles**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2013 (SCI-Expanded)
- CCCVI. **Measurement of the Upsilon(1S), Upsilon(2S), and Upsilon(3S) Polarizations 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.110, no.8, 2013 (SCI-Expanded)
- CCCVII. **Search for Pair Production of Third-Generation Leptoquarks and Top Squarks 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.110, no.8, 2013 (SCI-Expanded)
- CCCVIII. **Search for supersymmetry in events with photons and low missing transverse energy 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.  
PHYSICS LETTERS B, vol.719, pp.42-61, 2013 (SCI-Expanded)
- CCCIX. **Search for contact interactions in mu(+)mu(-) 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., Eroe J., Fabjan C., et al.  
PHYSICAL REVIEW D, vol.87, no.3, 2013 (SCI-Expanded)
- CCCX. **Search for a narrow, spin-2 resonance decaying to a pair of Z bosons in the q(q)over-barl(+)l(-) final state**  
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.718, pp.1208-1228, 2013 (SCI-Expanded)
- CCCXI. **Measurement of the elliptic anisotropy of charged particles produced in PbPb collisions at root s(NN)=2.76 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW C, vol.87, no.1, 2013 (SCI-Expanded)
- CCCXII. **Search for supersymmetry in final states with missing transverse energy and 0, 1, 2, or >= 3 b-quark jets in 7 TeV pp collisions using the variable alpha(T)**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.

- JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2013 (SCI-Expanded)
- CCCXIII. **Observation of a diffractive contribution to dijet production 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.  
PHYSICAL REVIEW D, vol.87, no.1, 2013 (SCI-Expanded)
- CCCXIV. **Studies of jet quenching using isolated-photon plus jet correlations in PbPb and pp collisions at root s(NN)=2.76 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.718, no.3, pp.773-794, 2013 (SCI-Expanded)
- CCCXV. **Search for narrow resonances and quantum black holes in inclusive and b-tagged dijet mass spectra from pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2013 (SCI-Expanded)
- CCCXVI. **Search for heavy quarks decaying into a top quark and a W or Z boson using lepton plus jets events in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2013 (SCI-Expanded)
- CCCXVII. **Search for flavor changing neutral currents in top quark decays 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.718, pp.1252-1272, 2013 (SCI-Expanded)
- CCCXVIII. **Search for new physics in events with opposite-sign leptons, jets, and missing transverse energy in pp collisions at root s=7 TeV**  
Chatrchyan S., Collaboration C. M. S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.  
PHYSICS LETTERS B, vol.718, no.3, pp.815-840, 2013 (SCI-Expanded)
- CCCXIX. **Search for a W ' boson decaying to a bottom quark and a top quark in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.718, pp.1229-1251, 2013 (SCI-Expanded)
- CCCXX. **Observation of long-range, near-side angular correlations in pPb collisions at the LHC**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.  
PHYSICS LETTERS B, vol.718, no.3, pp.795-814, 2013 (SCI-Expanded)
- CCCXXI. **Evidence for Associated Production of a Single Top Quark and W Boson 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.110, no.2, 2013 (SCI-Expanded)
- CCCXXII. **Forward-backward asymmetry of Drell-Yan lepton pairs in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.718, no.3, pp.752-772, 2013 (SCI-Expanded)
- CCCXXIII. **Measurement of the Azimuthal Anisotropy of Neutral Pions in Pb-Pb Collisions at root S-NN=2.76 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.

PHYSICAL REVIEW LETTERS, vol.110, no.4, 2013 (SCI-Expanded)

- CCCXXIV. **Measurement of the ZZ production cross section and search for anomalous couplings in 212l' final states in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2013 (SCI-Expanded)
- CCCXXV. **Search for resonant t(t)over-bar production in lepton plus jets 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., Eroe J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2012 (SCI-Expanded)
- CCCXXVI. **Observation of Z decays to four leptons with the CMS detector at the LHC**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2012 (SCI-Expanded)
- CCCXXVII. **Measurement of the single-top-quark t-channel cross section in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2012 (SCI-Expanded)
- :CCXXVIII. **Combined search for the quarks of a sequential fourth generation**  
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.86, no.11, 2012 (SCI-Expanded)
- CCCXXIX. **Study of the Dijet Mass Spectrum in pp -> W + jets Events 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.109, no.25, 2012 (SCI-Expanded)
- CCCXXX. **Search for third-generation leptoquarks and scalar bottom quarks in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2012 (SCI-Expanded)
- CCCXXXI. **Measurement of the relative prompt production rate of chi(c2) and chi(c1) 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.  
EUROPEAN PHYSICAL JOURNAL C, vol.72, no.12, 2012 (SCI-Expanded)
- CCCXXXII. **Search for three-jet resonances 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.  
PHYSICS LETTERS B, vol.718, no.2, pp.329-347, 2012 (SCI-Expanded)
- :CCXXXIII. **Search for pair produced fourth-generation up-type quarks in pp collisions at root s=7 TeV with a lepton in the final state**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Ero J., Fabjan C., et al.  
PHYSICS LETTERS B, vol.718, no.2, pp.307-328, 2012 (SCI-Expanded)
- :CCXXXIV. **Measurement of the top-quark mass in t(t)over-bar events with lepton plus jets final states in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2012 (SCI-Expanded)
- CCCXXXV. **A New Boson with a Mass of 125 GeV Observed with the CMS Experiment at the Large Hadron**



## Collider

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

SCIENCE, vol.338, no.6114, pp.1569-1575, 2012 (SCI-Expanded)

- :CCXXXVI. **Search for new physics with long-lived particles decaying to photons and missing energy in pp collisions at root s=7 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2012 (SCI-Expanded)

- CCXXXVII. **Search for exclusive or semi-exclusive gamma gamma production and observation of exclusive and semi-exclusive e(+)e(-) production in pp collisions at root s=7 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2012 (SCI-Expanded)

- :CXXXVIII. **A search for a doubly-charged Higgs boson in pp collisions at root s=7 TeV**

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

EUROPEAN PHYSICAL JOURNAL C, vol.72, no.11, 2012 (SCI-Expanded)

- :CCXXXIX. **Ratios of dijet production cross sections as a function of the absolute difference in rapidity between jets in proton-proton collisions at root s=7 TeV**

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.72, no.11, 2012 (SCI-Expanded)

- CCCXL. **Search for electroweak production of charginos and neutralinos using leptonic final states in pp collisions at root s=7 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2012 (SCI-Expanded)

- CCCXLI. **Search for a W ' or Techni-rho Decaying into WZ 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.109, no.14, 2012 (SCI-Expanded)

- CCCXLII. **Search for supersymmetry in hadronic final states using M-T2 in pp collisions at root s=7 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2012 (SCI-Expanded)

- CCCXLIII. **Search for New Physics in the Multijet and Missing Transverse Momentum Final State in Proton-Proton Collisions at root s=7 TeV**

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

PHYSICAL REVIEW LETTERS, vol.109, no.17, 2012 (SCI-Expanded)

- CCCXLIV. **Search for charge-asymmetric production of W ' bosons in t(t)over-bar plus jet events from pp collisions at root s=7 TeV**

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

PHYSICS LETTERS B, vol.717, pp.351-370, 2012 (SCI-Expanded)

- CCCXLV. **Search for supersymmetry in events with b-quark jets and missing transverse energy 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.

PHYSICAL REVIEW D, vol.86, no.7, 2012 (SCI-Expanded)

- CCCXLVI. **Inclusive and differential measurements of the  $t(\bar{t})$  charge asymmetry in proton-proton collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroee J., Fabjan C., et al.  
PHYSICS LETTERS B, vol.717, pp.129-150, 2012 (SCI-Expanded)
- CCCXLVII. **Study of the inclusive production of charged pions, kaons, and protons in pp collisions at  $\sqrt{s}=0.9, 2.76, \text{ and } 7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroee J., Fabjan C., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.72, no.10, 2012 (SCI-Expanded)
- CCCXLVIII. **Measurement of the Pseudorapidity and Centrality Dependence of the Transverse Energy Density in Pb-Pb Collisions at  $\sqrt{s(NN)}=2.76$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroee J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW LETTERS, vol.109, no.15, 2012 (SCI-Expanded)
- CCCXLIX. **Search for heavy Majorana neutrinos in  $\mu(+/-)\mu(+/-) + \text{jets}$  and  $e(+/-)e(+/-) + \text{jets}$  events in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroee J., Fabjan C., et al.  
PHYSICS LETTERS B, vol.717, pp.109-128, 2012 (SCI-Expanded)
- CCCL. **Measurement of the top-quark mass in  $t(\bar{t})$  events with dilepton final states in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroee J., Fabjan C., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.72, no.10, 2012 (SCI-Expanded)
- CCCLI. **Performance of CMS muon reconstruction in pp collision events at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroee J., Fabjan C., Friedl M., et al.  
JOURNAL OF INSTRUMENTATION, vol.7, 2012 (SCI-Expanded)
- CCCLII. **Tests of CMS hadron forward calorimeter upgrade readout box prototype**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Mossolov V., Shumeiko N., Cornelis T., Ochsanu S., Roland B., Staykova Z., et al.  
JOURNAL OF INSTRUMENTATION, vol.7, 2012 (SCI-Expanded)
- CCCLIII. **Search for high-mass resonances decaying into tau-lepton pairs in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroee J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.716, no.1, pp.82-102, 2012 (SCI-Expanded)
- CCCLIV. **Search for a Light Pseudoscalar Higgs Boson in the Dimuon Decay Channel in pp Collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroee J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW LETTERS, vol.109, no.12, 2012 (SCI-Expanded)
- CCCLV. **Measurement of the underlying event in the Drell-Yan process in proton-proton collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroee J., Fabjan C., Friedl M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.72, no.9, 2012 (SCI-Expanded)
- CCCLVI. **Search for anomalous  $t(\bar{t})$  production in the highly-boosted all-hadronic final state**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroee J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.9, 2012 (SCI-Expanded)

- CCCLVII. **Search for dark matter and large extra dimensions in monojet events in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.9, 2012 (SCI-Expanded)
- CCCLVIII. **Search for heavy, top-like quark pair production in the dilepton final state in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.716, no.1, pp.103-121, 2012 (SCI-Expanded)
- CCCLIX. **Search for pair production of first- and second-generation scalar leptoquarks 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 D, vol.86, no.5, 2012 (SCI-Expanded)
- CCCLX. **Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Eroe J., Fabjan C., et al.  
PHYSICS LETTERS B, vol.716, no.1, pp.30-61, 2012 (SCI-Expanded)
- CCCLXI. **Search for a fermiophobic Higgs boson in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.9, 2012 (SCI-Expanded)
- CCCLXII. **Search for physics beyond the standard model in events with a Z boson, jets, and missing transverse energy in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.716, no.2, pp.260-284, 2012 (SCI-Expanded)
- CCCLXIII. **Measurement of the Electron Charge Asymmetry in Inclusive W Production 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.  
PHYSICAL REVIEW LETTERS, vol.109, no.11, 2012 (SCI-Expanded)
- CCCLXIV. **Search for stopped long-lived particles produced in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J. J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2012 (SCI-Expanded)
- CCCLXV. **Study of W boson production in PbPb and pp collisions at root s(NN)=2.76 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.715, pp.66-87, 2012 (SCI-Expanded)
- CCCLXVI. **Search for New Physics with Same-Sign Isolated Dilepton Events with Jets and Missing Transverse Energy**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW LETTERS, vol.109, no.7, 2012 (SCI-Expanded)
- CCCLXVII. **Measurement of the Lambda(b) cross section and the (Lambda)over-bar(b) to Lambda(b) ratio with J/psi Lambda decays in pp collisions at root s=7 TeV CMS Collaboration**  
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.714, pp.136-157, 2012 (SCI-Expanded)

- :CCLXVIII. **Search for new physics in events with same-sign dileptons and b-tagged jets in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2012 (SCI-Expanded)
- CCCLXIX. **Measurement of the underlying event activity in pp collisions at root s=0.9 and 7 TeV with the novel jet-area/median approach**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2012 (SCI-Expanded)
- CCCLXX. **Search for leptonic decays of W bosons in pp collisions at root s=7TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2012 (SCI-Expanded)
- CCCLXXI. **Search for narrow resonances in dilepton mass spectra in pp collisions at root s=7 TeV CMS Collaboration**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.714, pp.158-179, 2012 (SCI-Expanded)
- CCCLXXII. **Search for a light charged Higgs boson in top quark decays in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Aguilo E., Bergauer T., Dragicevic M., Erö J., Fabjan C., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2012 (SCI-Expanded)
- :CCLXXIII. **Azimuthal Anisotropy of Charged Particles at High Transverse Momenta in Pb-Pb Collisions at root s-NN=2.76 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW LETTERS, vol.109, no.2, 2012 (SCI-Expanded)
- :CCLXXIV. **Search for heavy long-lived charged particles in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.713, pp.408-433, 2012 (SCI-Expanded)
- CCCLXXV. **Observation of a New Xi(b) Baryon**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW LETTERS, vol.108, no.25, 2012 (SCI-Expanded)
- :CCLXXVI. **Measurement of the mass difference between top and antitop quarks**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2012 (SCI-Expanded)
- CCLXXVII. **Search for anomalous production of multilepton events in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2012 (SCI-Expanded)
- :CLXXVIII. **Measurement of the t(t)-bar production cross section in pp collisions at root s=7 TeV in dilepton final states containing a tau**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW D, vol.85, no.11, 2012 (SCI-Expanded)
- :CCLXXIX. **Jet momentum dependence of jet quenching in PbPb collisions at root s(NN)=2.76 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,

- Friedl M., et al.  
PHYSICS LETTERS B, vol.712, no.3, pp.176-197, 2012 (SCI-Expanded)
- CCCLXXX. **Shape, transverse size, and charged-hadron multiplicity of jets in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,  
Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2012 (SCI-Expanded)
- CCCLXXXI. **Search for neutral Higgs bosons decaying to tau pairs in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C.,  
Friedl M., et al.  
PHYSICS LETTERS B, vol.713, no.2, pp.68-90, 2012 (SCI-Expanded)
- CCCLXXXII. **Measurement of the inclusive production cross sections for forward jets and for dijet events with one forward and one central jet in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,  
Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2012 (SCI-Expanded)
- CCCLXXXIII. **Search for heavy bottom-like quarks in 4.9 fb(-1) of pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,  
Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2012 (SCI-Expanded)
- CCCLXXXIV. **Search for large extra dimensions in dimuon and dielectron events in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C.,  
Friedl M., et al.  
PHYSICS LETTERS B, vol.711, no.1, pp.15-34, 2012 (SCI-Expanded)
- CCCLXXXV. **Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at root s(NN)=2.76 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C.,  
Friedl M., et al.  
EUROPEAN PHYSICAL JOURNAL C, vol.72, no.5, 2012 (SCI-Expanded)
- CCCLXXXVI. **Search for the standard model Higgs boson decaying into two photons in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C.,  
Friedl M., et al.  
PHYSICS LETTERS B, vol.710, no.3, pp.403-425, 2012 (SCI-Expanded)
- CCCLXXXVII. **Search for a Higgs boson in the decay channel  $H \rightarrow ZZ(**) \rightarrow q(q)\overline{\text{bar}}l(-)l(+)$  in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,  
Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2012 (SCI-Expanded)
- CCCLXXXVIII. **Search for microscopic black holes in pp collisions at root s=7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,  
Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2012 (SCI-Expanded)
- CCCLXXXIX. **Search for  $B\text{-}S(0) \rightarrow \mu(+)\mu(-)$  and  $B\text{-}0 \rightarrow \mu(+)\mu(-)$  decays**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C.,  
Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2012 (SCI-Expanded)
- CCCXC. **Measurement of isolated photon production in pp and PbPb collisions at root s(NN)=2.76 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C.,  
Friedl M., et al.  
PHYSICS LETTERS B, vol.710, no.2, pp.256-277, 2012 (SCI-Expanded)
- CCCXCI. **Search for the standard model Higgs boson decaying to bottom quarks in pp collisions at root s=7**

## TeV

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PHYSICS LETTERS B, vol.710, no.2, pp.284-306, 2012 (SCI-Expanded)

- CCCXCII. **Search for the standard model Higgs boson decaying to  $W+W-$  in the fully leptonic final state in pp collisions at root  $s=7$  TeV**

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

PHYSICS LETTERS B, vol.710, no.1, pp.91-113, 2012 (SCI-Expanded)

- CCCXCIII. **Search for the standard model Higgs boson in the  $H \rightarrow ZZ \rightarrow l^{(+)}l^{(-)}\tau^{(+)}\tau^{(-)}$  decay channel in pp collisions at root  $s=7$  TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2012 (SCI-Expanded)

- CCCXCIV. **Search for Signatures of Extra Dimensions in the Diphoton Mass Spectrum at the Large Hadron Collider**

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

PHYSICAL REVIEW LETTERS, vol.108, no.11, 2012 (SCI-Expanded)

- CCCXCV. **Combined results of searches for the standard model Higgs boson in pp collisions at root  $s=7$  TeV**

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

PHYSICS LETTERS B, vol.710, no.1, pp.26-48, 2012 (SCI-Expanded)

- CCCXCVI. **Search for the standard model Higgs boson in the  $H \rightarrow ZZ \rightarrow 2l2\nu$  channel in pp collisions at root  $s=7$  TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2012 (SCI-Expanded)

- CCCXCVII. **Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at root  $s=7$  TeV**

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

PHYSICS LETTERS B, vol.709, pp.28-49, 2012 (SCI-Expanded)

- CCCXCVIII. **Study of high- $p(T)$  charged particle suppression in PbPb compared to pp collisions at root  $s(NN)=2.76$  TeV**

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

EUROPEAN PHYSICAL JOURNAL C, vol.72, no.3, 2012 (SCI-Expanded)

- CCCXCIX.  **$J/\psi$  and  $\psi(2S)$  production in pp collisions at root  $s=7$  TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2012 (SCI-Expanded)

- CD. **Measurement of the rapidity and transverse momentum distributions of Z bosons in pp collisions at root( $s$ )=7 TeV**

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

PHYSICAL REVIEW D, vol.85, no.3, 2012 (SCI-Expanded)

- CDI. **Forward energy flow, central charged-particle multiplicities, and pseudorapidity gaps in W and Z boson events from 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.72, no.1, 2012 (SCI-Expanded)

- CDII. **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**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW LETTERS, vol.107, no.19, 2011 (SCI-Expanded)
- CDIII. **Measurement of energy flow at large pseudorapidities in pp collisions at  $\sqrt{s}=0.9$  and 7 TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2011 (SCI-Expanded)
- CDIV. **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., Eroo J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.704, no.5, pp.411-433, 2011 (SCI-Expanded)
- CDV. **Measurement of the Inclusive Jet Cross Section in pp Collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW LETTERS, vol.107, no.13, 2011 (SCI-Expanded)
- CDVI. **Measurement of the ratio of the 3-jet to 2-jet cross sections in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.702, no.5, pp.336-354, 2011 (SCI-Expanded)
- CDVII. **Measurement of the t-Channel Single Top Quark Production Cross Section in pp Collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.  
PHYSICAL REVIEW LETTERS, vol.107, no.9, 2011 (SCI-Expanded)
- CDVIII. **Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at  $\sqrt{s(NN)}=2.76$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2011 (SCI-Expanded)
- CDIX. **Search for a  $W$  boson decaying to a muon and a neutrino in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.701, no.2, pp.160-179, 2011 (SCI-Expanded)
- CDX. **Search for a heavy bottom-like quark in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.701, no.2, pp.204-223, 2011 (SCI-Expanded)
- CDXI. **Measurement of  $W$  gamma and  $Z$  gamma production in pp collisions at  $\sqrt{s}=7$  TeV**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.  
PHYSICS LETTERS B, vol.701, no.5, pp.535-555, 2011 (SCI-Expanded)
- CDXII. **Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy at the LHC**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroo J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2011 (SCI-Expanded)
- CDXIII. **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.,

- Fried M., et al.  
PHYSICS LETTERS B, vol.699, pp.25-47, 2011 (SCI-Expanded)
- CDXIV. **First measurement of hadronic event shapes in pp collisions at root s=7 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., Fruehwirth R., et al.  
PHYSICS LETTERS B, vol.699, pp.48-67, 2011 (SCI-Expanded)
- CDXV. **Measurement of Bose-Einstein correlations in pp collisions at root s=0.9 and 7 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., Fruehwirth R., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2011 (SCI-Expanded)
- CDXVI. **Search for large extra dimensions in the diphoton final state at the Large Hadron Collider**  
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2011 (SCI-Expanded)
- CDXVII. **Search for heavy stable charged particles in pp collisions at root s=7 TeV**  
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Fabjan C., Friedl M., Fruehwirth R., et al.  
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2011 (SCI-Expanded)
- CDXVIII. **Measurement of the Isolated Prompt Photon Production Cross Section in pp Collisions at root s=7 TeV**  
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Ero J., Fabjan C., Friedl M., Fruehwirth R., et al.  
PHYSICAL REVIEW LETTERS, vol.106, no.8, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Search for Leptonic CP Violation with the ESSnuSBplus Project**  
Aguilar J., Anastasopoulos M., Baussan E., Bhattacharyya A., Bignami A., Blennow M., Bogomilov M., Bolling B., Bouquerel E., Bramati F., et al.  
Letters in High Energy Physics, vol.2024, 2024 (Scopus)
- II. **J psi bozunumlarından gelen müon çiftlerini Kullanarak momentum ölçeklendirme kalibrasyonu**  
GÖKBULUT G., KAYIŞ TOPAKSU A.  
Ç.Ü Fen ve Mühendislik Bilimleri Dergisi, 2016 (Peer-Reviewed Journal)
- III. **Momentum Scale Calibration of Muon Tracks Using The Muon Pairs From J Decays**  
GÖKBULUT G., KAYIŞ TOPAKSU A.  
Ç.Ü FEN ve MÜHENDİSLİK BİLİMLERİ DERGİSİ, vol.34, no.5, 2016 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Combining Forces for a Novel European Facility for Neutrino-Antineutrino Symmetry-Violation Discovery (EuroNuNet)**  
GÖKBULUT G.  
Prospects in Neutrino Physics, 20 - 22 December 2017
- II. **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.  
MESON 2016, 2 - 07 June 2016, vol.130, pp.1029
- III. **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.

QCD@Work 2016, 27 - 30 June 2016, vol.129, pp.2

**IV. Recent Results from CMS**

DORDEVIC M., KHACHATRYAN V., ÖZDEMİR K., HOŞ İ., ÖNENGÜT G., EŞKUT E., POLATÖZ A., KAYIŞ TOPAKSU A., GÖKBULUT G., CMS C.

19 th International Seminar on High Energy Physics(Quarks-2016), 29 May - 04 June 2016, vol.125, pp.1001

**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.

ISMD 2015, 4 - 09 October 2015, vol.120, pp.2003

**VI. Higgs to tau tau Anaysis in the CMS experiment**

Olszewski M., ÖZDEMİR K., HOŞ İ., ADIGÜZEL A., KANGAL E. E., DUMANOĞLU İ., EŞKUT E., GÖKBULUT G., POLATÖZ A., KAYIŞ TOPAKSU A., et al.

Ephiphany 2016 Conference, 7 - 09 January 2016, vol.47, pp.1697-1703

**VII. 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.

Ephiphany 2016 Conference, 7 - 09 January 2016, vol.47, pp.1397-1415

**VIII. MPI and UE corrections to jet measuremnts and influence on PDF determination and alfas**

ÇERÇİ S., BAKIRCI M. N., SUNAR ÇERÇİ D., KANGAL E. E., GÖKBULUT G., EŞKUT E., DUMANOĞLU İ., POLATÖZ A., KAYIŞ TOPAKSU A., CMS C.

MPI@LHC 2015, 23 - 27 November 2015

**IX. Low pT Jet Cross Section Measurement in pp Collisions at root s 8 TeV**

ÇERÇİ S., ÖZDEMİR K., HOŞ İ., ADIGÜZEL A., ÖNENGÜT G., GÖKBULUT G., CMS C.

37th International Conference on High Energy Physics (ICHEP), 2 - 09 July 2014

## Supported Projects

GÖKBULUT G., EU Framework Program Project, ESSnuSB, 2018 - Continues

GÖKBULUT G., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, CMS Deneyinde Hadronik Kalorimetrenin Yenileme/İzlenimi ve Fizik Analizleri, 2014 - Continues

## Metrics

Publication: 430

Citation (WoS): 26161

Citation (Scopus): 22597

H-Index (WoS): 70

H-Index (Scopus): 77

## Congress and Symposium Activities

Prospects in Neutrino Physics, Attendee, London, United Kingdom, 2017

TÜBİTAK 4007 Adana Bilim Şenliği, CERN ve Anti Madde, Atölye Lideri, Attendee, Adana, Turkey, 2016

Comparison of Xib in 2011 & 2012 Data, BPH WG Meeting, Attendee, Genève, Switzerland, 2013

CMS deneyinde 8 TeV enerjili proton-proton çarpışmalarında Xib- sinyalinin gözlenmesi, ÇÜ YEF Toplantısı, Attendee, Adana, Turkey, 2013

2012 service studies for B Physics Group, ÇÜ HEP Meeting, Attendee, Adana, Turkey, 2013

First results from 2011 MuScl fits to J/psi, B Physics Meeting, Attendee, Geneva, Turkey, 2012

Muon momentum scale with J/psi using MuSclFit, Muon POG Meeting, Attendee, Geneva, Switzerland, 2012

Solar and Atmospheric Neutrino Problems, 4th International Student Conference of the Balkan Physical Union (ISCBPU-4), Attendee, Bodrum, Turkey, 2006

## **Awards**

GÖKBULUT G., Çukurova Üniversitesi, Fen-Edebiyat Fakültesi, 2012 yılı Bilimsel Aktivite Altın Ödülü, Çukurova Üniversitesi, February 2012

## **Non Academic Experience**

Other, Cern

Other, Cern