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Education Information

Doctorate, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, Turkey 1996 - 2001

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, The Design and Tests of the Very Forward Calorimeter of the CMS Detector at Large Hadron Collider, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, 2001

Research Areas

Physics, Basic Particles and Areas, Natural Sciences

Academic Titles / Tasks

Professor, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, 2010 - Continues

Advising Theses

DUMANOĞLU İ., ANALYSES OF HB, HE, HO AND HF CALORIMETERS OF CMS DETECTOR WITH 2015 COSMIC DATA AND PROTON ? PROTON COLLISION DATA AT $\sqrt{s} = 13$ TeV, Postgraduate, M.İnce(Student), 2016

DUMANOĞLU İ., CMS DETEKTÖRÜNÜN HF KALORİMETRESİNDE YENİLENEN FÇT'LERİN PERFORMANS ANALİZİ, Postgraduate, S.Lezki(Student), 2016

DUMANOĞLU İ., CMS detektörünün hf kalorimetresinin dört anotlu fotoçoğaltıcı tüplerinin kontrol testleri, Postgraduate, U.Kayhan(Student), 2014

DUMANOĞLU İ., Search for dark matter and large extra dimensions in monojet events in pp collisions at $\sqrt{s} = 8$ TeV, Doctorate, E.Ersin(Student), 2013

DUMANOĞLU İ.,). BHC'de 7 TeV'lik Proton-Proton Çarpışmalarındaki Tek Jet Olaylarında $W^+e^+?_e$ Bozunumundan Kaynaklı SM Katkılarının Elenmesi, Postgraduate, Ü.Kaya(Student), 2012

DUMANOĞLU İ., Search for dark matter and large extra dimensions in monojet events in pp collisions at $\sqrt{s}=7$ tev, Doctorate, M.Vergili(Student), 2012

DUMANOĞLU İ., Determination of underlying event contribution to the jet energies in CMS heavy ion collisions, Postgraduate, A.Nart(Student), 2011

DUMANOĞLU İ., CMS HF dedektöründe kullanılan fiberlerin radyasyondan gördüğü zararı görüntüleme sistemi, Postgraduate, Y.Güler(Student), 2011

DUMANOĞLU İ., CMS'deki CASTOR kalorimetresinde kullanılan foto-çoğaltıcı tüplerin kalite kontrol testlerinin yapılması ve sonuçlarının incelenmesi, Postgraduate, Z.Demir(Student), 2010

DUMANOĞLU İ., 2008 beam test of CMS-CASTOR prototype IV ve CMS-HF test of online radiation damage monitoring system, Postgraduate, D.Uzun(Student), 2010

DUMANOĞLU İ., Jet shapes at CMS in proton-proton collisions at $\sqrt{s}=14$ TeV, Doctorate, P.Kurt(Student), 2009

DUMANOĞLU İ., LHC Hızlandırıcısındaki CMS Deneyinin HF Kalorimetresinin Test Verilerini Kullanarak HF'in Temel Özelliklerinin Araştırılması, Doctorate, H.Özkurt(Student), 2007

DUMANOĞLU İ., Bilgisayar destekli fizik deneyleri, Postgraduate, D.Nalan(Student), 2006

DUMANOĞLU İ., Jet energy calibration studies, Postgraduate, M.Vergili(Student), 2006

DUMANOĞLU İ., Yüksek enerjilerde proton-proton etkileşmelerinin simülasyonu, Postgraduate, N.Akgül(Student), 2005

DUMANOĞLU İ., HF dedektörünün liflerinin kalite testleri, Postgraduate, H.Çelik(Student), 2005

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Searches for violation of Lorentz invariance in top quark pair production using dilepton events in 13 TeV proton-proton collisions**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.857, 2024 (SCI-Expanded)
- II. **K_S^0 and $\Lambda(\Lambda^-)$ two-particle femtoscopic correlations in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.857, 2024 (SCI-Expanded)
- III. **Measurement of the production cross section of a Higgs boson with large transverse momentum in its decays to a pair of τ leptons in proton-proton collisions at $\sqrt{s}=13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.857, 2024 (SCI-Expanded)
- IV. **Performance of CMS muon reconstruction from proton-proton to heavy ion collisions**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
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- V. **Performance of the CMS electromagnetic calorimeter in pp collisions at $\sqrt{s} = 13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
Journal of Instrumentation, vol.19, no.9, 2024 (SCI-Expanded)
- VI. **Measurement of Energy Correlators inside Jets and Determination of the Strong Coupling Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.

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

VII. **Search for long-lived particles decaying in the CMS muon detectors in proton-proton collisions at Formula Presented**

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

Physical Review D, vol.110, no.3, 2024 (SCI-Expanded)

VIII. **Measurement of multijet azimuthal correlations and determination of the strong coupling in proton-proton collisions at $s=13\text{TeV}$**

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

European Physical Journal C, vol.84, no.8, 2024 (SCI-Expanded)

IX. **Search for new physics in high-mass diphoton events from proton-proton collisions at $s = 13\text{ TeV}$**

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

Journal of High Energy Physics, vol.2024, no.8, 2024 (SCI-Expanded)

X. **Constraints on anomalous Higgs boson couplings from its production and decay using the WW channel in proton-proton collisions at $s=13\text{TeV}$**

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

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XI. **Evidence for tWZ production in proton-proton collisions at $s=13\text{ TeV}$ in multilepton final states**

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

Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.855, 2024 (SCI-Expanded)

XII. **Observation of the Formula Presented Meson and Suppression of Formula Presented States in Pb-Pb Collisions at Formula Presented**

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

Physical Review Letters, vol.133, no.2, 2024 (SCI-Expanded)

XIII. **Search for Narrow Trijet Resonances in Proton-Proton Collisions at Formula Presented**

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

Physical Review Letters, vol.133, no.1, 2024 (SCI-Expanded)

XIV. **Search for a scalar or pseudoscalar dilepton resonance produced in association with a massive vector boson or top quark-antiquark pair in multilepton events at $\sqrt{s}=13\text{ TeV}$**

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

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XV. **Extracting the speed of sound in quark-gluon plasma with ultrarelativistic lead-lead collisions at the LHC**

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

Reports on Progress in Physics, vol.87, no.7, 2024 (SCI-Expanded)

XVI. **Search for high-mass exclusive diphoton production with tagged protons in proton-proton collisions at Formula Presented**

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

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XVII. **Search for ZZ and ZH production in the $b\bar{b}b\bar{b}$ final state using proton-proton collisions at $s=13\text{TeV}$**

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

- European Physical Journal C, vol.84, no.7, 2024 (SCI-Expanded)
- XVIII. **Search for dark QCD with emerging jets in proton-proton collisions at $s = 13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Journal of High Energy Physics, vol.2024, no.7, 2024 (SCI-Expanded)
- XIX. **Search for long-lived heavy neutral leptons decaying in the CMS muon detectors in proton-proton collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Physical Review D, vol.110, no.1, 2024 (SCI-Expanded)
- XX. **Observation of the Formula Presented decay and studies of the Formula Presented baryon in proton-proton collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Physical Review D, vol.110, no.1, 2024 (SCI-Expanded)
- XXI. **Combination of Measurements of the Top Quark Mass from Data Collected by the ATLAS and CMS Experiments at $\sqrt{s}=7$ and 8 TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Physical Review Letters, vol.132, no.26, 2024 (SCI-Expanded)
- XXII. **Search for Baryon Number Violation in Top Quark Production and Decay Using Proton-Proton Collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
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- XXIII. **Search for pair production of scalar and vector leptoquarks decaying to muons and bottom quarks in proton-proton collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XXIV. **Search for the lepton flavor violating $\tau \rightarrow 3\mu$ decay in proton-proton collisions at $s=13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.853, 2024 (SCI-Expanded)
- XXV. **Nonresonant central exclusive production of charged-hadron pairs in proton-proton collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
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- XXVI. **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)
- XXVII. **Combined search for electroweak production of winos, binos, higgsinos, and sleptons in proton-proton collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XXVIII. **Search for stealth supersymmetry in final states with two photons, jets, and low missing transverse momentum in proton-proton collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del

- Valle A. E., Hussain P., et al.
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XXIX. **Search for long-lived particles using displaced vertices and missing transverse momentum in proton-proton collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XXX. **Development of the CMS detector for the CERN LHC Run 3**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Hussain P., Jeitler M., et al.
Journal of Instrumentation, vol.19, no.5, 2024 (SCI-Expanded)
- XXXI. **Search for an exotic decay of the Higgs boson into a Z boson and a pseudoscalar particle in proton-proton collisions at $s=13\text{TeV}$**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.852, 2024 (SCI-Expanded)
- XXXII. **Search for exotic decays of the Higgs boson to a pair of pseudoscalars in the $\mu\mu b\bar{b}$ and $\tau\tau b\bar{b}$ final states**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Hussain P., et al.
European Physical Journal C, vol.84, no.5, 2024 (SCI-Expanded)
- XXXIII. **Search for a new resonance decaying into two spin-0 bosons in a final state with two photons and two bottom quarks in proton-proton collisions at (Formula presented.)**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
Journal of High Energy Physics, vol.2024, no.5, 2024 (SCI-Expanded)
- XXXIV. **Measurement of simplified template cross sections of the Higgs boson produced in association with w or z bosons in the Formula Presented decay channel in proton-proton collisions at Formula Presented**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
Physical Review D, vol.109, no.9, 2024 (SCI-Expanded)
- XXXV. **Search for flavor changing neutral current interactions of the top quark in final states with a photon and additional jets in proton-proton collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
Physical Review D, vol.109, no.7, 2024 (SCI-Expanded)
- XXXVI. **Search for supersymmetry in final states with disappearing tracks in proton-proton collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
Physical Review D, vol.109, no.7, 2024 (SCI-Expanded)
- XXXVII. **Timing performance of the CMS High Granularity Calorimeter prototype**
Acar B., Adamov G., Adloff C., Afanasiev S., Akchurin N., Akgün B., Khan F., Alhousseini M., Alison J., Alpana A., et al.
Journal of Instrumentation, vol.19, no.4, 2024 (SCI-Expanded)
- XXXVIII. **Observation of $WW\gamma$ Production and Search for $H\gamma$ Production in Proton-Proton Collisions at $\sqrt{s}=13\text{TeV}$**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
Physical Review Letters, vol.132, no.12, 2024 (SCI-Expanded)
- XXXIX. **New Structures in the Formula Presented Mass Spectrum in Proton-Proton Collisions at Formula**

Presented

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

Physical Review Letters, vol.132, no.11, 2024 (SCI-Expanded)

- XL. **Study of azimuthal anisotropy of $\Upsilon(1S)$ mesons in pPb collisions at $\sqrt{s_{NN}} = 8.16$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.850, 2024 (SCI-Expanded)
- XLII. **Search for new Higgs bosons via same-sign top quark pair production in association with a jet in proton-proton collisions at $\sqrt{s}=13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
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- XLIII. **Measurements of azimuthal anisotropy of nonprompt D^0 mesons in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
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- XLIV. **Search for dark matter particles in $W+W^-$ events with transverse momentum imbalance in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
Journal of High Energy Physics, vol.2024, no.3, 2024 (SCI-Expanded)
- XLV. **Search for long-lived heavy neutral leptons with lepton flavour conserving or violating decays to a jet and a charged lepton**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
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- XLVI. **Search for Scalar Leptoquarks Produced via τ -Lepton-Quark Scattering in pp Collisions at $\sqrt{s}=13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
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- XLVII. **Muon identification using multivariate techniques in the CMS experiment in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
Journal of Instrumentation, vol.19, no.2, 2024 (SCI-Expanded)
- XLVIII. **Two-particle Bose-Einstein correlations and their Lévy parameters in PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
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- XLIX. **Higher-order moments of the elliptic flow distribution in PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
Journal of High Energy Physics, vol.2024, no.2, 2024 (SCI-Expanded)
- XLX. **Search for Inelastic Dark Matter in Events with Two Displaced Muons and Missing Transverse Momentum in Proton-Proton Collisions at $\sqrt{s}=13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., et al.
Physical Review Letters, vol.132, no.4, 2024 (SCI-Expanded)

- L. **Evidence for the Higgs Boson Decay to a Z Boson and a Photon at the LHC**
Aad G., Abbott B., Abeling K., Abicht N., Abidi S., Aboulhorma A., Abramowicz H., Abreu H., Abulaiti Y., Acharya B., et al.
Physical review letters, vol.132, no.2, pp.21803, 2024 (SCI-Expanded)
- LI. **Measurement of the τ lepton polarization in Z boson decays in proton-proton collisions at (Formula presented.)**
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- LII. **Luminosity determination using Z boson production at the CMS experiment**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Hussain P., et al.
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- LIII. **Study of charm hadronization with prompt Λ_c^+ baryons in proton-proton and lead-lead collisions at $\sqrt{s} = 5.02$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
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- LIV. **Measurement of the production cross section for a W boson in association with a charm quark in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- LV. **Multiplicity and rapidity dependence of strange hadron production in pp, pPb, and PbPb collisions at the LHC**
POLATÖZ A., KAYIŞ TOPAKSU A., DUMANOĞLU İ., Collaboration C.
PHYSICS LETTERS B, vol.768, pp.103-129, 2017 (SCI-Expanded)
- LVI. **Measurements of differential production cross sections for a Z boson in association with jets in pp collisions at $\sqrt{s}=8$ TeV**
Khachatryan V., SIRUNYAN A. M., Tumasyan A., Wolfgang A., Asiler E., BRANDSTETTER J., BERGAUER T., DUMANOĞLU İ.
JOURNAL OF HIGH ENERGY PHYSICS, no.4, pp.1-20, 2017 (SCI-Expanded)
- LVII. **Charged-particle nuclear modification factors in PbPb and pPb collisions at $\sqrt{s(NN)}=5.02$ TeV**
SIRUNYAN A. M., Tumasyan A., Wolfgang A., Ece A., BRANDSTETTER J., BERGAUER T., DUMANOĞLU İ., Collaboration C.
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- LVIII. **Relative Modification of Prompt $\psi(2S)$ and J/ ψ Yields from pp to PbPb Collisions at $\sqrt{s(NN)}=5.02$ TeV**
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- LIX. **Search for electroweak production of charginos in final states with two T leptons in pp collisions at $\sqrt{s}=8$ TeV**
Khachatryan V., SIRUNYAN A. M., Wolfgang A., Tumasyan A., ASILAR E., BRANDSTETTER J., BERGAUER T., DUMANOĞLU İ., KAYIŞ TOPAKSU A., Collaboration C.
JOURNAL OF HIGH ENERGY PHYSICS, no.4, pp.1-20, 2017 (SCI-Expanded)
- LX. **Search for high-mass diphoton resonances in proton-proton collisions at 13 TeV and combination with 8 TeV search**
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LXXXIV. Measurement of the Z gamma production cross section in pp collisions at 8 TeV and search for anomalous triple gauge boson couplings

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CXII. Interpretation of searches for supersymmetry with simplified models

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- CXXXI. **Search for Pair Production of Third-Generation Leptoquarks and Top Squarks in pp Collisions at root $s=7$ TeV**
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- CXXXII. **Measurement of the elliptic anisotropy of charged particles produced in PbPb collisions at root $s(NN)=2.76$ TeV**
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- CXXXIII. **Evidence for Associated Production of a Single Top Quark and W Boson in pp Collisions at root $s=7$ TeV**
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- CXXXIV. **Search for a W^+ boson decaying to a bottom quark and a top quark in pp collisions at root $s=7$ TeV**
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- CXXXV. **Measurement of the Azimuthal Anisotropy of Neutral Pions in Pb-Pb Collisions at root $S-NN=2.76$ TeV**
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- CXXXVI. **Studies of jet quenching using isolated-photon plus jet correlations in PbPb and pp collisions at root $s(NN)=2.76$ TeV**
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- CXXXVII. **Search for flavor changing neutral currents in top quark decays in pp collisions at 7 TeV**
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final state

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- CXLII. **Search for new physics in events with opposite-sign leptons, jets, and missing transverse energy in pp collisions at root s=7 TeV**

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- CXLVI. **Search for third-generation leptoquarks and scalar bottom quarks in pp collisions at root s=7 TeV**

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

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

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- CL. **Search for charge-asymmetric production of W ' bosons in t(t)over-bar plus jet events from pp**

collisions at root s=7 TeV

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- CLIV. **Search for supersymmetry in events with b-quark jets and missing transverse energy in pp collisions at 7 TeV**

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- CLVII. **Performance of CMS muon reconstruction in pp collision events at root s=7TeV**

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- CLVIII. **Measurement of the top-quark mass in $t(\bar{t})$ events with dilepton final states in pp collisions at root s=7 TeV**

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- CLIX. **Study of the inclusive production of charged pions, kaons, and protons in pp collisions at root s=0.9, 2.76, and 7 TeV**

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

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- CLXI. **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**
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- CLXII. **Search for high-mass resonances decaying into tau-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., Eroë J., Fabjan C., Friedl M., et al.
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- CLXIII. **Search for a Light Pseudoscalar Higgs Boson in the Dimuon Decay Channel in pp Collisions at root s=7 TeV**
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- CLXIV. **Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC**
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- CLXV. **Measurement of the Electron Charge Asymmetry in Inclusive W Production in pp Collisions at root s=7 TeV**
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- CLXVIII. **Search for heavy, top-like quark pair production in the dilepton final state in pp collisions at root s=7 TeV**
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- CLXXII. **Study of W boson production in PbPb and pp collisions at root s(NN)=2.76 TeV**
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- CLXXIII. **Search for heavy long-lived charged particles in pp collisions at root s=7 TeV**
Chatrchyan S., Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Eroe J., Fabjan C., Friedl M., et al.
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- CLXXIV. **Azimuthal Anisotropy of Charged Particles at High Transverse Momenta in Pb-Pb Collisions at root S-NN=2.76 TeV**
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- CLXXV. **Search for Dark Matter and Large Extra Dimensions in pp Collisions Yielding a Photon and Missing Transverse Energy**
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- CLXXVI. **Search for neutral Higgs bosons decaying to tau pairs in pp collisions at root s=7 TeV**
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- CLXXVII. **Measurement of the t(t)over-bar production cross section in pp collisions at root s=7 TeV in dilepton final states containing a tau**
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- CLXXXI. **Search for large extra dimensions in dimuon and dielectron events in pp collisions at root s=7 TeV**
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- CLXXXII. **Measurement of isolated photon production in pp and PbPb collisions at root s(NN)=2.76 TeV**
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- CLXXXIII. **Search for the standard model Higgs boson decaying to bottom quarks in pp collisions at root s=7 TeV**

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- CLXXXV. **Search for the Standard Model Higgs Boson in the Decay Channel $H \rightarrow ZZ \rightarrow 4l$ in pp Collisions at root s=7 TeV**
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- CLXXXVI. **Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at root s=7 TeV**
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- :LXXXVIII. **Combined results of searches for the standard model Higgs boson in pp collisions at root s=7 TeV**
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- CLXXXIX. **Search for Signatures of Extra Dimensions in the Diphoton Mass Spectrum at the Large Hadron Collider**
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- CXC. **Study of high-p(T) charged particle suppression in PbPb compared to pp collisions at root s(NN)=2.76 TeV**
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- CXCI. **Measurement of the rapidity and transverse momentum distributions of Z bosons in pp collisions at root(s)=7 TeV**
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- CXCII. **Inclusive search for squarks and gluinos in pp collisions at root s=7 TeV**
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- CXCIII. **Forward energy flow, central charged-particle multiplicities, and pseudorapidity gaps in W and Z boson events from pp collisions at root s=7 TeV**
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- CXCIV. Performance of tau-lepton reconstruction and identification in CMS**
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- CXCV. Measurement of the weak mixing angle with the Drell-Yan process in proton-proton collisions at the LHC**
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- CXCVI. Measurement of the underlying event activity at the LHC with $\sqrt{s} = 7$ TeV and comparison with $\sqrt{s} = 0.9$ TeV**
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