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Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstits, Fizik, Turkey 1987 - 1992

Postgraduate, Cukurova University, Fen Bilimleri Enstits, Fizik, Turkey 1983 - 1986

Undergraduate, Cukurova University, Fen Edebiyat Fakltesi, Fizik, Turkey 1979 - 1983

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Production of Secondaries at Supercollider Energies , Cukurova University, Fizik, Yksek Enerji FiziĐi, 1992

Postgraduate, Yksek Enerjili Elastik Hadronik Saılma ile İlgili Deneysel Veriler ve Fenomenoloji , Cukurova University, Fizik, Fizik/Yksek Enerji FiziĐi, 1986

Research Areas

Physics, Basic Particles and Areas, Natural Sciences

Academic Titles / Tasks

Professor, Cukurova University, Fen-Edebiyat Fakltesi, Fizik, 2001 - Continues

Associate Professor, Cukurova University, Fen-Edebiyat Fakltesi, Fizik, 1995 - 2001

Assistant Professor, Cukurova University, Fen-Edebiyat Fakltesi, Fizik, 1993 - 1995

Research Assistant, Cukurova University, Fen-Edebiyat Fakltesi, Fizik, 1984 - 1993

Academic and Administrative Experience

Cukurova University, Fizik, Fizik, 2010 - Continues

Cukurova University, Fizik, Fizik, 2003 - 2006

Cukurova University, Fen Edebiyat Fakültesi, 2002 - 2005

Advising Theses

- Eşkut E., 13 TeV'lik pp Çarpışmalarında Enerji Akışının CMS Deneyi ile Ölçülmesi, Doctorate, E.PINAR(Student), 2023
- Eşkut E., İleri hadronik kalorimetre (HF)'in LED'lerinde gözlenen tekleme problemi, Postgraduate, B.KAPLAN(Student), 2022
- Eşkut E., CMS DEDEKTÖRÜNÜN HB KALORİMETRESİNDE YENİLENEN KALİBRASYON BİRİMLERİNİN LAZER TESTLERİ ANALİZİ, Postgraduate, B.Tuğçe(Student), 2020
- Eşkut E., DETERMINATION OF THE JET ENERGY SCALE CORRECTIONS FOR THE LOW PT JETS IN PROTON-PROTON COLLISIONS AT $\sqrt{s}=13$ TeV WITH THE CMS EXPERIMENT, Doctorate, Z.Şeyma(Student), 2020
- Eşkut E., İLERİ BÖLGE JETLERİ İÇİN BELİRLENEN JET ENERJİ DÜZELTME FAKTÖRLERİNİN TESTİ, Postgraduate, A.ŞAHİN(Student), 2020
- EŞKUT E., Measurement of Energy Density as a Function of Pseudorapidity in proton-proton Collisions at 13 TeV with the CMS Experiment LHC, Doctorate, Ç.Zorbilmez(Student), 2019
- EŞKUT E., Hadronik İleri Kalorimetre (HF)'de Kullanılan QIE10 Kartlarının Pedestal, CAPID, ICI Testleri, Postgraduate, İ.Baldan(Student), 2017
- EŞKUT E., Measurements of Inclusive Low-PT Jets Cross-Section and Azimuthal Angle Decorrelation of Jets with Large Rapidity Separation Using Run I CMS Data, Doctorate, İ.Hoş(Student), 2016
- EŞKUT E., Inclusive Forward Jet Cross Section Measurement in Proton-Proton Collisions at $\sqrt{s}=7$ TeV, Doctorate, S.Girgis(Student), 2014
- EŞKUT E., CMS'deki Hadronik Dış Kalorimetre (HO) için HO904 Kararlılık Testlerinde LED Analizi, Postgraduate, M.Özcan(Student), 2013
- EŞKUT E., CMS Deneyindeki HB ve HE Kalorimetresindeki HFD'lerin Gürültü Analizleri ve HO Test Düzenindeki SiFÇ'lerin Self Trigger Analizi, Postgraduate, Z.Şeyma(Student), 2013
- EŞKUT E., İleri Hadronik Kalorimetre (HF)'de Kullanılacak olan Yeni Foto Çoğaltıcı Tüp (FÇT)'lerin Testleri ve Farklı Jet Algoritmalarında ve Jet Tiplerinde Jet Analizi, Postgraduate, F.Hayal(Student), 2013
- EŞKUT E., CMS'deki ZDC Dedektörü İçim Akım Ayırıcı Devre, Postgraduate, Ç.Zorbilmez(Student), 2012
- EŞKUT E., CMS'in HF Detektöründeki FÇT (Foto Çoğaltıcı Tüp)'lerin Yüksek Voltaj Altındaki Davranışlarının İncelenmesi (, Postgraduate, E.Pnar(Student), 2009
- EŞKUT E., Performance Improvement of an AGATA Segmented Germanium Detector, Doctorate, S.Aydın(Student), 2009
- EŞKUT E., Low-x QCD with Jets in the CMS Hadron Forward Calorimeter in Proton-Proton Collisions at 14 TeV and Test Studies of Forward Calorimeters, Doctorate, S.Çerçi(Student), 2009
- EŞKUT E., CMS CASTOR Detektöründe Kullanılan Kuvartz Plakaların Ütülmesi ve Dedektöre Montajı, Postgraduate, A.Ayhan(Student), 2009
- EŞKUT E., ATLAS MDT'leri için hodoskop sistemi, Postgraduate, H.Şahiner(Student), 2007
- EŞKUT E., CMS (Compact Muon Solenoid) Deneyindeki CASTOR Detektörünün Test Veri Analizleri, Postgraduate, N.Aksay(Student), 2006
- EŞKUT E., Study of the Response of the CMS Hadron Calorimeter, Doctorate, S.Esen(Student), 2006
- EŞKUT E., 12C+12C ve 16O+16O nükleer reaksiyonlarının esnek ve esnek olmayan etkileşmelerinin yeni çiftlenim potansiyeli kullanılarak incelenmesi, Postgraduate, S.Aydın(Student), 2004
- EŞKUT E., CMS Deneyinde CP Kırınımı, Postgraduate, S.Çerçi(Student), 2003
- EŞKUT E., Nötrino Fiziğinde Son Gelişmeler, Postgraduate, H.Topaklı(Student), 2003
- EŞKUT E., CMS Deneyinde Araştırılacak Fizik Konuları, Postgraduate, S.Esen(Student), 2001
- EŞKUT E., CMS (Compact Muon Solenoid) Deneyinde Kullanılacak Olan VFCAL (En İleri Kalorimetre)'in Enerji Lineerliliği, Postgraduate, S.Sancar(Student), 2000
- EŞKUT E., Güneşsel ve Atmosferik Nötrino Problemleri, Postgraduate, H.Öztürk(Student), 1997

Jury Memberships

Associate Professor Exam, Doçentlik sınavında jüri üyesi, Ankara Üniversitesi, March, 2017
Associate Professor Exam, Doçentlik sınavı, Eskişehir Üniversitesi, April, 2015
Associate Professor Exam, Doçentlik Sınav Jürisi, ÜAK/Boğaziçi Üniv., June, 2014
Associate Professor Exam, Doçentlik Sınav Jürisi, ÜAK/Boğaziçi Üniv., October, 2013
Associate Professor Exam, Doçentlik Sınav Jürisi, ÜAK/Ankara TOBB Univ., July, 2012
Associate Professor Exam, Doçentlik Sınav Jürisi, ÜAK/Çukurova Üniv., April, 2010

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Evidence for tWZ production in proton-proton collisions at $s=13$ TeV in multilepton final states**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.855, 2024 (SCI-Expanded)
- II. **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)
- III. **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)
- IV. **Search for ZZ and ZH production in the $bb\bar{b}\bar{b}$ final state using proton-proton collisions at $s=13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
European Physical Journal C, vol.84, no.7, 2024 (SCI-Expanded)
- V. **Search for a scalar or pseudoscalar dilepton resonance produced in association with a massive vector boson or top quark-antiquark $ff\bar{f}\bar{f}$ pair in multilepton events at $\sqrt{s}=13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
Physical Review D, vol.110, no.1, 2024 (SCI-Expanded)
- VI. **Search for high-mass exclusive diphoton production with tagged protons in proton-proton collisions at Formula Presented**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
Physical Review D, vol.110, no.1, 2024 (SCI-Expanded)
- VII. **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)
- VIII. **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)
- IX. **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)

- X. **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)
- XI. **Search for Baryon Number Violation in Top Quark Production and Decay Using Proton-Proton Collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Physical Review Letters, vol.132, no.24, 2024 (SCI-Expanded)
- XII. **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)
- XIII. **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)
- XIV. **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)
- XV. **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)
- XVI. **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)
- XVII. **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)
- XVIII. **Nonresonant central exclusive production of charged-hadron pairs in proton-proton collisions at Formula Presented**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Physical Review D, vol.109, no.11, 2024 (SCI-Expanded)
- XIX. **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)

- XX. **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)
- XXI. **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)
- XXII. **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)
- XXIII. **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)
- XXIV. **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)
- XXV. **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)
- XXVI. **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)
- XXVII. **Search for new Higgs bosons via same-sign top quark pair production in association with a jet in proton-proton collisions at $s=13\text{TeV}$**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.850, 2024 (SCI-Expanded)
- XXVIII. **Measurements of azimuthal anisotropy of nonprompt D^0 mesons in PbPb collisions at $s_{NN}=5.02\text{TeV}$**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.850, 2024 (SCI-Expanded)
- XXIX. **Search for dark matter particles in $W+W^-$ events with transverse momentum imbalance in proton-proton collisions at $s = 13\text{TeV}$**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
Journal of High Energy Physics, vol.2024, no.3, 2024 (SCI-Expanded)
- XXX. **Study of azimuthal anisotropy of $\Upsilon(1S)$ mesons in pPb collisions at $s_{NN} = 8.16\text{TeV}$**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.

- Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.850, 2024 (SCI-Expanded)
- XXXI. **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.
Physical review letters, vol.132, no.6, pp.61801, 2024 (SCI-Expanded)
- XXXII. **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)
- XXXIII. **Two-particle Bose-Einstein correlations and their Lévy parameters in PbPb collisions at Formula Presented TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
Physical Review C, vol.109, no.2, 2024 (SCI-Expanded)
- XXXIV. **Higher-order moments of the elliptic flow distribution in PbPb collisions at $s_{NN} = 5.02$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
Journal of High Energy Physics, vol.2024, no.2, 2024 (SCI-Expanded)
- XXXV. **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)
- XXXVI. **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., Abouhorma A., Abramowicz H., Abreu H., Abulaiti Y., Acharya B., et al.
Physical review letters, vol.132, no.2, pp.21803, 2024 (SCI-Expanded)
- XXXVII. **Study of charm hadronization with prompt Λ_c^+ baryons in proton-proton and lead-lead collisions at $s_{NN} = 5.02$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., Jeitler M., et al.
Journal of High Energy Physics, vol.2024, no.1, 2024 (SCI-Expanded)
- XXXVIII. **Measurement of the τ lepton polarization in Z boson decays in proton-proton collisions at (Formula presented.)**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
Journal of High Energy Physics, vol.2024, no.1, 2024 (SCI-Expanded)
- XXXIX. **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**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Hussain P., Jeitler M., et al.
European Physical Journal C, vol.84, no.1, 2024 (SCI-Expanded)
- XL. **Luminosity determination using Z boson production at the CMS experiment**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Hussain P., et al.
European Physical Journal C, vol.84, no.1, 2024 (SCI-Expanded)
- XLI. **Evidence for Higgs boson decay to a pair of muons**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A. E., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2021 (SCI-Expanded)

- XLII. **Search for bottom-type, vectorlike quark pair production in a fully hadronic final state in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.
PHYSICAL REVIEW D, vol.102, no.11, 2020 (SCI-Expanded)
- XLIII. **Inclusive search for highly boosted Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2020 (SCI-Expanded)
- XLIV. **Dependence of inclusive jet production on the anti-k(T) distance parameter in pp collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2020 (SCI-Expanded)
- XLV. **Measurement of $B\text{-}c(2S)^{+}$ and $B\text{-}c^{*}(2S)^{+}$ cross section ratios in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.
PHYSICAL REVIEW D, vol.102, no.9, 2020 (SCI-Expanded)
- XLVI. **$W^{+}W^{-}$ boson pair production in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.
PHYSICAL REVIEW D, vol.102, no.9, 2020 (SCI-Expanded)
- XLVII. **Search for decays of the 125 GeV Higgs boson into a Z boson and a rho or phi meson**
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.11, 2020 (SCI-Expanded)
- XLVIII. **Search for a light charged Higgs boson in the $H\text{-}+/- \rightarrow cs$ channel in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.
PHYSICAL REVIEW D, vol.102, no.7, 2020 (SCI-Expanded)
- XLIX. **Reconstruction of signal amplitudes in the CMS electromagnetic calorimeter in the presence of overlapping proton-proton interactions**
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.
JOURNAL OF INSTRUMENTATION, vol.15, no.10, 2020 (SCI-Expanded)
- L. **Search for supersymmetry in proton-proton collisions at $\sqrt{s}=13$ TeV in events with high-momentum Z bosons and missing transverse momentum**
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- LX. **Measurement of electroweak WZ boson production and search for new physics in WZ plus two jets events in pp collisions at $\sqrt{s}=13$ TeV**
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- LXIII. **Performance of missing transverse momentum reconstruction in proton-proton collisions at root**

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LXIV. Search for supersymmetry in final states with photons and missing transverse momentum in proton-proton collisions at 13 TeV

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LXV. Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at root $s=13$ TeV

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LXVI. Jet Shapes of Isolated Photon-Tagged Jets in Pb-Pb and pp Collisions at root $S\text{-NN}=5.02$ TeV

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LXVII. Observation of prompt J/psi meson elliptic flow in high-multiplicity pPb collisions at root $s(\text{NN})=8.16$ TeV

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LXVIII. Search for dark matter produced in association with a single top quark or a top quark pair in proton-proton collisions at $s=13$ TeV

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LXIX. Search for pair production of first-generation scalar leptoquarks at root $s=13$ TeV

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LXX. Evidence for light-by-light scattering in ultraperipheral PbPb collisions at root $S\text{-NN}=5.02$ TeV

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LXXI. Search for new particles decaying to a jet and an emerging jet

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LXXII. Non-Gaussian elliptic-flow fluctuations in PbPb collisions at root $S\text{-NN}=5.02$ TeV

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LXXIII. Multiparticle correlations and higher order harmonics in pPb collisions at root $s(\text{NN})=8.16$ TeV

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LXXIV. Search for the chiral magnetic effect at the LHC with the CMS experiment

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- LXXV. **D-0-Meson R-AA in PbPb Collisions at $\sqrt{s(NN)}=5.02$ TeV and Elliptic Flow in pPb Collisions at $\sqrt{s(NN)}=8.16$ TeV with CMS**
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- LXXVI. **Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- LXXVII. **Fragmentation of J/psi in jets in pp collisions at $\sqrt{s}=5.02$ TeV Batoul Diab for the CMS collaboration**
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- LXXVIII. **Beyond nPDFs effects : Prompt J/psi and psi(2S) production in pPb and pp collisions**
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- LXXIX. **Measurement of anisotropic flow in XeXe collisions at 5.44 TeV with the CMS experiment**
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- LXXX. **Measurement of inclusive and differential Higgs boson production cross sections in the diphoton decay channel in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- LXXXII. **Search for low-mass resonances decaying into bottom quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- LXXXIII. **Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- LXXXIV. **Search for pair-produced three-jet resonances in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- LXXXV. **Event shape variables measured using multijet final states in proton-proton collisions at $\sqrt{s}=13$ TeV**
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Valle A. E., et al.

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LXXXVI. Observation of Medium-Induced Modifications of Jet Fragmentation in Pb-Pb Collisions at $\sqrt{s(NN)}=5.02$ TeV Using Isolated Photon-Tagged Jets

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LXXXVII. Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos and b quarks at $\sqrt{s}=13$ TeV

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

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LXXXVIII. Pseudorapidity and transverse momentum dependence of flow harmonics in pPb and PbPb collisions

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PHYSICAL REVIEW C, vol.98, no.4, 2018 (SCI-Expanded)

LXXXIX. Measurement of charged particle spectra in minimum-bias events from proton-proton collisions at $\sqrt{s}=13$ TeV

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

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XC. Search for third-generation scalar leptoquarks decaying to a top quark and a τ lepton at $\sqrt{s}=13$ TeV

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XC1. Search for additional neutral MSSM Higgs bosons in the tau tau final state in proton-proton collisions at $\sqrt{s}=13$ TeV

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

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

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XCIII. Search for a heavy resonance decaying into a Z boson and a vector boson in the $v(\bar{v})q(\bar{q})$ final state

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XCIV. Measurement of angular parameters from the decay $B^0 \rightarrow K^{*0} \mu^{+} \mu^{-}$ in proton-proton collisions at $\sqrt{s}=8$ TeV

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

PHYSICS LETTERS B, vol.781, pp.517-541, 2018 (SCI-Expanded)

XCv. Measurement of differential cross sections for the production of top quark pairs and of additional jets in lepton plus jets events from pp collisions at $\sqrt{s}=13$ TeV

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PHYSICAL REVIEW D, vol.97, no.11, 2018 (SCI-Expanded)

XCvi. Search for high-mass resonances in final states with a lepton and missing transverse momentum at

root s=13 TeV

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

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XCVII. Search for lepton flavour violating decays of the Higgs boson to mu tau and e tau in proton-proton collisions at root s=13 TeV

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XCVIII. Search for excited quarks of light and heavy flavor in gamma plus jet final states in proton-proton collisions at root s=13 TeV

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XCIX. Search for gauge-mediated supersymmetry in events with at least one photon and missing transverse momentum in pp collisions at ,root s=13 TeV

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C. Search for pair production of excited top quarks in the lepton plus jets final state The CMS Collaboration

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PHYSICS LETTERS B, vol.778, pp.349-370, 2018 (SCI-Expanded)

CI. 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., Eroee J., et al.

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CII. Brightness and uniformity measurements of plastic scintillator tiles at the CERN H2 test beam

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CIII. Measurements of t(t)over-bar cross sections in association with b jets and inclusive jets and their ratio using dilepton final states in pp collisions at root s=13 TeV

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

PHYSICS LETTERS B, vol.776, pp.355-378, 2018 (SCI-Expanded)

CIV. Radioactive source calibration test of the CMS Hadron Endcap Calorimeter test wedge with Phase I upgrade electronics

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CV. Search for supersymmetry in events with at least one photon, missing transverse momentum, and large transverse event activity in proton-proton collisions at root s=13TeV

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CVI. Measurements of the associated production of a Z boson and b jets in pp collisions at root s=8 TeV

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- CVII. **Search for standard model production of four top quarks 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., Eroe J., Flechl M., et al.
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- CVIII. **Measurement of the $t(\bar{t})$ production cross section using events with one lepton and at least one jet in pp collisions at root $s=13\text{TeV}$**
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- CIX. **Coherent J/ψ photoproduction in ultra-peripheral PbPb collisions at root $s(\text{NN})=2.76\text{TeV}$ with the CMS experiment**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- CX. **Measurements of the charm jet cross section and nuclear modification factor in pPb collisions at root $s_{\text{NN}}=5.02\text{TeV}$**
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.306-329, 2017 (SCI-Expanded)
- CXI. **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)
- CXII. **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)
- CXIII. **Measurement of the jet mass in highly boosted $t(\bar{t})$ events from pp collisions at root $s=8\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
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- CXIV. **Search for $t(\bar{t})$ resonances in highly boosted lepton plus jets and fully hadronic final states in proton-proton collisions at root $s=13\text{TeV}$**
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- CXV. **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 $s=8\text{TeV}$**
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)
- CXVI. **Measurement of the mass difference between top quark and antiquark in pp collisions at root $s=8\text{TeV}$**
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)

- CXVII. **Search for heavy gauge W' bosons in events with an energetic lepton and large missing transverse momentum 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., Eroe J., et al.
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- CXVIII. **Measurement of electroweak-induced production of W gamma with two jets in pp collisions at root $s=8\text{TeV}$ and constraints on anomalous quartic gauge couplings**
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- CXIX. **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 $s=13\text{TeV}$**
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