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International Researcher IDs

Publons / Web Of Science ResearcherID: ABA-5645-2020

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Education Information

Doctorate, Universität Hamburg, Faculty of Mathematics, Informatics and Natural Sciences, Department of Physics, Germany 2012 - 2015

Postgraduate, Izmir Institute Of Technology, Faculty Of Science, Department Of Physics (English), Turkey 2008 - 2011

Undergraduate, Dokuz Eylül University, Buca Faculty Of Education, Department Of Secondary School Science And Mathematics Branch Education, Turkey 2002 - 2007

Certificates, Courses and Trainings

Vocational Course, Eğitimde Ölçme-Değerlendirme İlkelerine Uygun Sınav Hazırlama Yöntemleri, Istanbul University, 2021

Vocational Training, Workshop Applying for Research Grants, RWTH Aachen University, 2021

Personal Evolution, Leadership Skills, RWTH Aachen University, 2020

Personal Evolution, Time Management in Scientific Research,, PIER Graduate School, Hamburg University, 2016

Personal Evolution, Scientific writing, PIER Graduate School, Hamburg University, 2014

Personal Evolution, Elevator Pitches for Science and Research, Career Center of Hamburg University, 2014

Dissertations

Doctorate, Light Higgsinos at the ILC: Precision Measurements and Detector Requirements, Hamburg University, Faculty of Mathematics, Informatics and Natural Sciences, Department of Physics, 2015

Postgraduate, Higgs Bosons of Gauge-Extended Supersymmetry at the LHC, Izmir Institute Of Technology, Faculty Of Science, Department Of Physics (English), 2011

Research Areas

Computer Learning, Statistical Analysis and Applications, Basic Particles and Areas, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Istanbul University, Faculty of Science, Department of Physics, 2021 - Continues

Research Assistant PhD, RWTH Aachen University, Aachen, Institute of Experimental Physics III-B, Department of Physics, 2016 - 2021

Researcher, CERN (European Organization for Nuclear Research), Geneva, CMS (Compact Muon Solenoid) Experiment Research Group, 2019 - 2020

Research Assistant, DESY (Deutsches Elektronen-Synchrotron), Hamburg, Research Group at Future Linear Collider (FLC), 2012 - 2015

Research Assistant, Izmir Institute Of Technology, Faculty Of Science, Department Of Physics (English), 2008 - 2012

Courses

Statistical Methods in Physics, Undergraduate, 2022 - 2023, 2021 - 2022

Statistical Techniques in Data Analysis II, Doctorate, 2022 - 2023

Computer Programming - I, Undergraduate, 2022 - 2023, 2021 - 2022

Elementary Particles, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Machine Learning and Application in Physics - II, Doctorate, 2023 - 2024, 2022 - 2023

Machine Learning and Application in Physics - I, Postgraduate, 2022 - 2023

Advanced Applications in Physics II, Undergraduate, 2022 - 2023, 2021 - 2022

Statistical Techniques in Data Analysis I, Postgraduate, 2022 - 2023

Application of High Energy Physics II, Postgraduate, 2021 - 2022

Computer Programming - II, Undergraduate, 2022 - 2023, 2021 - 2022

Advanced Applications in Physics I, Undergraduate, 2022 - 2023, 2021 - 2022

Application of High Energy Physics I, Postgraduate, 2021 - 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Observation of four top quark production 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.
PHYSICS LETTERS B, vol.847, 2023 (SCI-Expanded)
- II. **Search for physics beyond the standard model in top quark production with additional leptons in the context of effective field theory**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Hussain P. S., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2023 (SCI-Expanded)
- III. **First measurement of the forward rapidity gap distribution in pPb collisions at $\sqrt{s_{NN}}=8.16$ TeV**
Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.
PHYSICAL REVIEW D, vol.108, no.9, 2023 (SCI-Expanded)
- IV. **Search for a high-mass dimuon resonance produced in association with b quark jets at $\sqrt{s}=13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Hussain P. S., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2023 (SCI-Expanded)
- V. **Search for the lepton-flavor violating decay of the Higgs boson and additional Higgs bosons in the $e^+e^- \rightarrow \mu^+\mu^-$ final state in proton-proton collisions at $\sqrt{s}=13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Hussain P. S., et al.
PHYSICAL REVIEW D, vol.108, no.7, 2023 (SCI-Expanded)
- VI. **Two-particle azimuthal correlations in pp interactions using pPb collisions at $s_{NN}=8.16$ TeV**
Tumasyan A., Adam W., Bergauer T., Dragicevic M., Escalante Del Valle A., Fruhwirth R., Jeitler M., Krammer N.,

Lechner L., Liko D., et al.

Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.844, 2023 (SCI-Expanded)

VII. Observation of the Rare Decay of the η Meson to Four Muons

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.131, no.9, pp.91903, 2023 (SCI-Expanded)

VIII. Azimuthal Correlations within Exclusive Dijets with Large Momentum Transfer in Photon-Lead Collisions.

Tumasyan A., Adam W., Bergauer T., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., Lechner L., Liko D., et al.

Physical review letters, vol.131, no.5, pp.51901, 2023 (SCI-Expanded)

IX. Measurements of jet multiplicity and jet transverse momentum in multijet events in proton–proton collisions at $\sqrt{s}=13\text{TeV}$

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Frühwirth R., Jeitler M., et al.

European Physical Journal C, vol.83, no.8, 2023 (SCI-Expanded)

X. Azimuthal correlations in Z +jets events in proton–proton collisions at $\sqrt{s}=13\text{TeV}$

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Frühwirth R., Jeitler M., et al.

European Physical Journal C, vol.83, no.8, 2023 (SCI-Expanded)

XI. Search for electroweak production of charginos and neutralinos at root $s=13\text{ TeV}$ in final states containing hadronic decays of WW, WZ, or WH and missing transverse momentum

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

PHYSICS LETTERS B, vol.842, 2023 (SCI-Expanded)

XII. Search for Higgs boson decays into Z and J/psi and for Higgs and Z boson decays into J/psi or Y pairs in pp collisions at root $s=13\text{ TeV}$

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

PHYSICS LETTERS B, vol.842, 2023 (SCI-Expanded)

XIII. Precision measurement of the Z boson invisible width in pp collisions root $s=13\text{ TeV}$

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

PHYSICS LETTERS B, vol.842, 2023 (SCI-Expanded)

XIV. Search for a massive scalar resonance decaying to a light scalar and a Higgs boson in the four b quarks final state with boosted topology

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

Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.842, 2023 (SCI-Expanded)

XV. CMS pythia 8 colour reconnection tunes based on underlying-event data

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Frühwirth R., Jeitler M., et al.

European Physical Journal C, vol.83, no.7, 2023 (SCI-Expanded)

XVI. Search for CP violating top quark couplings in pp collisions at $\sqrt{s} = 13\text{ TeV}$

Tumasyan A., Adam W., Bergauer T., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., Liko D., et al.

Journal of High Energy Physics, vol.2023, no.7, 2023 (SCI-Expanded)

XVII. Measurement of the mass dependence of the transverse momentum of lepton pairs in Drell–Yan production in proton–proton collisions at $\sqrt{s}=13\text{TeV}$

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Valle A. E. D., Frühwirth R., Jeitler M., Krammer N., et al.

European Physical Journal C, vol.83, no.7, 2023 (SCI-Expanded)

- XVIII. **Observation of electroweak $W+W$ - pair production in association with two jets in proton-proton collisions at $\sqrt{s}=13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
PHYSICS LETTERS B, vol.841, 2023 (SCI-Expanded)
- XIX. **Search for CP violation using (Formula presented.) events in the lepton+jets channel in pp collisions at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2023, no.6, 2023 (SCI-Expanded)
- XX. **Search for heavy resonances and quantum black holes in $e\mu$, $e\tau$, and $\mu\tau$ final states in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2023, no.5, 2023 (SCI-Expanded)
- XXI. **Strange hadron collectivity in pPb and PbPb collisions**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2023 (SCI-Expanded)
- XXII. **Observation of triple J/psi meson production in proton-proton collisions**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.
NATURE PHYSICS, vol.19, pp.338-350, 2023 (SCI-Expanded)
- XXIII. **Nuclear modification of Y states in pPb collisions at $\sqrt{s_{NN}}=5.02$ TeV**
Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Flechl M., Frühwirth R., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.835, 2022 (SCI-Expanded)
- XXIV. **Search for new particles in an extended Higgs sector with four b quarks in the final state at $\sqrt{s}=13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.835, 2022 (SCI-Expanded)
- XXV. **Measurements of the associated production of a W boson and a charm quark in proton-proton collisions at $\sqrt{s}=8$ TeV**
Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Valle A. E. D., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.
European Physical Journal C, vol.82, no.12, 2022 (SCI-Expanded)
- XXVI. **Evidence for WW/WZ vector boson scattering in the decay channel $\ell\ell\nu qq$ produced in association with two jets in proton-proton collisions at $\sqrt{s}=13$ TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.
PHYSICS LETTERS B, vol.834, 2022 (SCI-Expanded)
- XXVII. **Measurement of the Higgs boson width and evidence of its off-shell contributions to ZZ production**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.
Nature Physics, vol.18, no.11, pp.1329-1334, 2022 (SCI-Expanded)
- XXVIII. **Search for a W' boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Journal of High Energy Physics, vol.2022, no.9, 2022 (SCI-Expanded)

- XXIX. **Search for high-mass resonances decaying to a jet and a Lorentz-boosted resonance in proton-proton collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.

PHYSICS LETTERS B, vol.832, 2022 (SCI-Expanded)

- XXX. **Search for Higgs Boson Pair Production in the Four b Quark Final State in Proton-Proton Collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.

Physical Review Letters, vol.129, no.8, 2022 (SCI-Expanded)

- XXXI. **Measurement of the Drell-Yan forward-backward asymmetry at high dilepton masses in proton-proton collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.8, 2022 (SCI-Expanded)

- XXXII. **Probing Charm Quark Dynamics via Multiparticle Correlations in Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02$ TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.

PHYSICAL REVIEW LETTERS, vol.129, no.2, 2022 (SCI-Expanded)

- XXXIII. **Search for Resonances Decaying to Three W Bosons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.

PHYSICAL REVIEW LETTERS, vol.129, no.2, 2022 (SCI-Expanded)

- XXXIV. **First Search for Exclusive Diphoton Production at High Mass with Tagged Protons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.

Physical Review Letters, vol.129, no.1, 2022 (SCI-Expanded)

- XXXV. **Search for new physics in the lepton plus missing transverse momentum final state in proton-proton collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.7, 2022 (SCI-Expanded)

- XXXVI. **Measurement of the inclusive and differential WZ production cross sections, polarization angles, and triple gauge couplings in pp collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Journal of High Energy Physics, vol.2022, no.7, 2022 (SCI-Expanded)

- XXXVII. **Search for heavy resonances decaying to $Z(\nu\bar{\nu})V(q\bar{q}')$ in proton-proton collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

Physical Review D, vol.106, no.1, 2022 (SCI-Expanded)

- XXXVIII. **Search for Flavor-Changing Neutral Current Interactions of the Top Quark and Higgs Boson in Final States with Two Photons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.

PHYSICAL REVIEW LETTERS, vol.129, no.3, 2022 (SCI-Expanded)

- XXXIX. **Identification of hadronic tau lepton decays using a deep neural network**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R.,

Jeitler M., Krammer N., et al.

Journal of Instrumentation, vol.17, no.7, 2022 (SCI-Expanded)

- XL. **Search for resonances decaying to three W bosons in the hadronic final state in proton-proton collisions at root s=13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., et al.
PHYSICAL REVIEW D, vol.106, no.1, 2022 (SCI-Expanded)
- XLII. **Search for long-lived heavy neutral leptons with displaced vertices in proton-proton collisions at $\sqrt{s}=13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2022, no.7, 2022 (SCI-Expanded)
- XLIII. **Observation of Bs 0 mesons and measurement of the Bs 0/B+ yield ratio in PbPb collisions at [Formula presented] TeV**
Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.829, 2022 (SCI-Expanded)
- XLIV. **Inclusive nonresonant multilepton probes of new phenomena at root s=13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., et al.
PHYSICAL REVIEW D, vol.105, no.11, 2022 (SCI-Expanded)
- XLV. **Analysis of the CP structure of the Yukawa coupling between the Higgs boson and tau leptons in proton-proton collisions at root s=13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.6, 2022 (SCI-Expanded)
- XLVI. **Observation of the B-c(+) Meson in Pb-Pb and pp Collisions at root s(NN)=5.02 TeV and Measurement of its Nuclear Modification Factor**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.
PHYSICAL REVIEW LETTERS, vol.128, no.25, 2022 (SCI-Expanded)
- XLVII. **FACET: a new long-lived particle detector in the very forward region of the CMS experiment**
Cerci S., Cerci D. S., Lazic D., Landsberg G., Cerutti F., Sabate-Gilarte M., Albrow M. G., Berryhill J., Green D. R., Hirschauer J., et al.
Journal of High Energy Physics, vol.2022, no.6, 2022 (SCI-Expanded)
- XLVIII. **Search for charged-lepton flavor violation in top quark production and decay in pp collisions at root s=13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.6, 2022 (SCI-Expanded)
- XLIX. **Search for resonant production of strongly coupled dark matter in proton-proton collisions at 13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.6, 2022 (SCI-Expanded)
- L. **Measurement of the inclusive and differential t(t)over-bar gamma cross sections in the dilepton channel and effective field theory interpretation in proton-proton collisions at root s=13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.5, 2022 (SCI-Expanded)
- L. **Observation of B0 → $\psi(2S)K^0_S\pi^+\pi^-$ and B0S → $\psi(2S)K^0_S$ decays**

Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Frühwirth R., Jeitler M., et al.
European Physical Journal C, vol.82, no.5, 2022 (SCI-Expanded)

- L.I. **Measurement of the production cross section for Z plus b jets in proton-proton collisions at root s=13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.
PHYSICAL REVIEW D, vol.105, no.9, 2022 (SCI-Expanded)
- L.II. **Search for heavy resonances decaying to a pair of Lorentz-boosted Higgs bosons in final states with leptons and a bottom quark pair at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2022, no.5, 2022 (SCI-Expanded)
- L.III. **Search for invisible decays of the Higgs boson produced via vector boson fusion in proton-proton collisions at root s=13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.
PHYSICAL REVIEW D, vol.105, no.9, 2022 (SCI-Expanded)
- L.IV. **Search for single production of a vector-like T quark decaying to a top quark and a Z boson in the final state with jets and missing transverse momentum at root s=13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.5, 2022 (SCI-Expanded)
- L.V. **Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
Journal of High Energy Physics, vol.2022, no.5, 2022 (SCI-Expanded)
- L.VI. **Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.
Journal of High Energy Physics, vol.2022, no.4, 2022 (SCI-Expanded)
- L.VII. **Search for a heavy resonance decaying into a top quark and a W boson in the lepton plus jets final state at root s=13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.4, 2022 (SCI-Expanded)
- L.VIII. **Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating nonresonant ZZ or ZH production at root s=13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2022, no.4, 2022 (SCI-Expanded)
- L.IX. **Precision measurement of the W boson decay branching fractions in proton-proton collisions at root s=13 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.
PHYSICAL REVIEW D, vol.105, no.7, 2022 (SCI-Expanded)
- L.X. **Measurement of the inclusive t(t)-bar production cross section in proton-proton collisions at root s=5.02 TeV**
Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R.,

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- LXI. **Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
Tumasyan A., Adam W., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., Lechner L., et al.
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- LXII. **Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at root s=13 TeV**
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- LXIII. **Search for long-lived particles decaying into muon pairs in proton-proton collisions at root s=13 TeV collected with a dedicated high-rate data stream**
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- LXIV. **Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at root s=13 TeV**
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- LXV. **Using Z Boson Events to Study Parton-Medium Interactions in Pb-Pb Collisions**
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- LXVI. **Search for $W\gamma$ resonances in proton-proton collisions at s=13 TeV using hadronic decays of Lorentz-boosted W bosons**
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- LXIX. **Search for strongly interacting massive particles generating trackless jets in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
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- LXX. **A new calibration method for charm jet identification validated with proton-proton collision events at root s=13 TeV**
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- LXXI. **Measurement of $W\text{-}\gamma$ differential cross sections in proton-proton collisions at root s=13**

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LXXII. **Fragmentation of jets containing a prompt J/ψ meson in PbPb and pp collisions at $\sqrt{s_{NN}}=5.02$ TeV**

Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.

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LXXIII. **Inclusive and differential cross section measurements of single top quark production in association with a Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV**

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LXXIV. **Search for heavy resonances decaying to WW, WZ, or WH boson pairs in a final state consisting of a lepton and a large-radius jet in proton-proton collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.

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LXXV. **Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $\sqrt{s}=13$ TeV**

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LXXVI. **Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV**

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LXXVII. **Measurement of the Inclusive and Differential Higgs Boson Production Cross Sections in the Decay Mode to a Pair of tau Leptons in pp Collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., Krammer N., et al.

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LXXVIII. **Search for long-lived particles decaying to leptons with large impact parameter 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., Frühwirth R., Jeitler M., et al.

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LXXIX. **Measurement of double-parton scattering in inclusive production of four jets with low transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV**

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LXXX. **Evidence for X(3872) in Pb-Pb Collisions and Studies of its Prompt Production at $\sqrt{s_{NN}}=5.02$ TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Frühwirth R., et al.

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LXXXI. **Study of quark and gluon jet substructure in Z plus jet and dijet events from pp collisions**

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- LXXXII. **Measurement of the top quark mass using events with a single reconstructed top quark in pp collisions at $\sqrt{s}=13$ TeV**

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- LXXXIII. **Search for Long-Lived Particles Decaying in the CMS End Cap Muon Detectors in Proton-Proton Collisions at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

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- LXXXIV. **Measurement of the inclusive and differential $t(\bar{t})$ over-bar gamma cross sections in the single-lepton channel and EFT interpretation at $\sqrt{s}=13$ TeV**

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

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- LXXXV. **Search for a heavy resonance decaying to a top quark and a W boson at $\sqrt{s} = 13$ TeV in the fully hadronic final state**

Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., Lechner L., et al.

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- LXXXVI. **Search for a heavy Higgs boson decaying into two lighter Higgs bosons in the tau tau bb final state at 13TeV**

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- LXXXVII. **Measurements of the Electroweak Diboson Production Cross Sections in Proton-Proton Collisions at $\sqrt{s}=5.02$ TeV Using Leptonic Decays**

Tumasyan A., Adam W., Andrejkovic W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

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- LXXXVIII. **Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s}=13$ TeV**

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- LXXXIX. **Observation of tW production in the single-lepton channel in pp collisions at $\sqrt{s}=13$ TeV**

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- XC. **Measurement of prompt open-charm production cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV**

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- XCI. **Measurement of differential $t(\bar{t})$ over-bar production cross sections in the full kinematic range using lepton plus jets events from proton-proton collisions at $\sqrt{s}=13$ TeV**

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- XCII. **Search for new particles in events with energetic jets and large missing transverse momentum in**

proton-proton collisions at root s=13 TeV

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XCIII. Measurement of the electroweak production of Z gamma and two jets in proton-proton collisions at root s=13 TeV and constraints on anomalous quartic gauge couplings

Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.

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XCIV. Study of Z boson plus jets events using variables sensitive to double-parton scattering in pp collisions at 13 TeV

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XCIV. Search for chargino-neutralino production in events with Higgs and W bosons using 137 fb⁻¹ of proton-proton collisions at root s=13 TeV

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XCVI. Measurements of the pp -> W-+/-gamma gamma and pp -> Z gamma gamma cross sections at root s=13 TeV and limits on anomalous quartic gauge couplings

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XCVII. Precision luminosity measurement in proton-proton collisions at root S=13 TeV in 2015 and 2016 at CMS

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XCVIII. Search for W ' bosons decaying to a top and a bottom quark at root s=13 TeV in the hadronic final state

Sirunyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Fruhwirth R., Jeitler M., et al.

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XCIX. First measurement of the cross section for top quark pair production with additional charm jets using dileptonic final states in pp collisions at root s=13 TeV

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C. Search for long-lived particles decaying to jets with displaced vertices in proton-proton collisions at root s=13 TeV

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CI. Constraints on anomalous Higgs boson couplings to vector bosons and fermions in its production and decay using the four-lepton final state

Sirunyan A. M., Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Fruhwirth R., Jeitler M., et al.

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CII. Observation of Forward Neutron Multiplicity Dependence of Dimuon Acoplanarity in Ultraperipheral Pb-Pb Collisions at root S-NN=5.02 TeV

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

PHYSICAL REVIEW LETTERS, vol.127, no.12, 2021 (SCI-Expanded)

CIII. **Search for top squark production in fully hadronic final states in proton-proton collisions at root $s=13$ TeV**

Sirunyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

PHYSICAL REVIEW D, vol.104, no.5, 2021 (SCI-Expanded)

CIV. **Measurements of angular distance and momentum ratio distributions in three-jet and Z + two-jet final states in pp collisions**

Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Valle A. E. D., Frühwirth R., Jeitler M., Krammer N., et al.

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CV. **Hard color-singlet exchange in dijet events in proton-proton collisions at root $s=13$ TeV**

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PHYSICAL REVIEW D, vol.104, no.3, 2021 (SCI-Expanded)

CVI. **Search for a heavy vector resonance decaying to a Z boson and a Higgs boson in proton-proton collisions at $\sqrt{s}=13$ TeV**

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EUROPEAN PHYSICAL JOURNAL C, vol.81, no.8, 2021 (SCI-Expanded)

CVII. **Search for top squarks in final states with two top quarks and several light-flavor jets in proton-proton collisions at root $s=13$ TeV**

Sirunyan A. M., Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.

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CVIII. **Constraints on the Initial State of Pb-Pb Collisions via Measurements of Z-Boson Yields and Azimuthal Anisotropy at root $s(NN)=5.02$ TeV**

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CIX. **Measurement of the azimuthal anisotropy of Y(1S) and Y(2S) mesons in PbPb collisions at root $s(NN)=5.02$ TeV**

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PHYSICS LETTERS B, vol.819, 2021 (SCI-Expanded)

CX. **Search for the rare decay of the W boson into a pion and a photon in proton-proton collisions at root $s=13$ TeV**

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PHYSICS LETTERS B, vol.819, 2021 (SCI-Expanded)

CXI. **Search for lepton-flavor violating decays of the Higgs boson in the mu tau and e tau final states in proton-proton collisions at root $s=13$ TeV**

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PHYSICAL REVIEW D, vol.104, no.3, 2021 (SCI-Expanded)

CXII. **Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at root $s=13$ TeV**

Sirunyan A. M., Tumasyan A., Adam W., Andrejkovic J. W., Bergauer T., Chatterjee S., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.

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- CXIII. **Search for singly and pair-produced leptoquarks coupling to third-generation fermions in proton-proton collisions at root s=13 TeV**
Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.
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- CXIV. **Search for resonant and nonresonant new phenomena in high-mass dilepton final states at root s=13 TeV**
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- CXV. **Performance of the CMS muon trigger system in proton-proton collisions at $\sqrt{s} = 13$ TeV**
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- CXVI. **MUSiC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CXVII. **Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at root s=13 TeV**
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.
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- CXVIII. **Search for long-lived particles using displaced jets in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Eroo J., Del Valle A. E., Frühwirth R., Jeitler M., et al.
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- CXIX. **Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Valle A. E. D., Frühwirth R., Jeitler M., et al.
European Physical Journal C, vol.81, no.6, 2021 (SCI-Expanded)
- CXX. **Measurement of the W gamma Production Cross Section in Proton-Proton Collisions at root s=13 TeV and Constraints on Effective Field Theory Coefficients**
Sirunyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
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- CXXI. **Observation of a New Excited Beauty Strange Baryon Decaying to $\Xi(-)(b)\pi(+)\pi(-)$**
Sirunyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
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- CXXII. **Measurements of the differential cross sections of the production of Z plus jets and gamma plus jets and of Z boson emission collinear with a jet in pp collisions at root s=13 TeV**
Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
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- CXXIII. **Measurement of the CP-violating phase $\phi(s)$ in the $B\text{-}s(0) \rightarrow J/\psi \phi(1020) \rightarrow \mu(+)\mu\text{-}K+K\text{-}$ channel in proton-proton collisions at root s=13 TeV**
Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

PHYSICS LETTERS B, vol.816, 2021 (SCI-Expanded)

CXXXIV. **First measurement of large area jet transverse momentum spectra in heavy-ion collisions**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Frühwirth R., et al.

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CXXXV. **Measurement of the Z boson differential production cross section using its invisible decay mode ($Z \rightarrow \nu\bar{\nu}$) in proton-proton collisions at $\sqrt{s}=13$ TeV**

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.

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CXXXVI. **Measurement of b jet shapes in proton-proton collisions at $\sqrt{s}=5.02$ TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Frühwirth R., et al.

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CXXXVII. **Electron and photon reconstruction and identification with the CMS experiment at the CERN LHC**

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.

JOURNAL OF INSTRUMENTATION, vol.16, no.5, 2021 (SCI-Expanded)

CXXXVIII. **In-medium modification of dijets in PbPb collisions at $\sqrt{s_{NN}}=5.02$ 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.

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CXXXIX. **Measurement of prompt D-0 and $\bar{D}^0$ meson azimuthal anisotropy and search for strong electric fields in PbPb collisions at $\sqrt{s_{NN}}=5.02$ 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.

PHYSICS LETTERS B, vol.816, 2021 (SCI-Expanded)

CXXX. **Study of Drell-Yan dimuon production in proton-lead collisions at $\sqrt{s_{NN}}=8.16$ 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.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.5, 2021 (SCI-Expanded)

CXXXI. **Measurement of the Higgs boson production rate in association with top quarks in final states with electrons, muons, and hadronically decaying tau leptons at $\sqrt{s}=13$ TeV**

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Ero J., Valle A. E. D., Frühwirth R., Jeitler M., Krammer N., et al.

European Physical Journal C, vol.81, no.4, 2021 (SCI-Expanded)

CXXXII. **Angular analysis of the decay $B^+ \rightarrow K^*(892)^+ \mu^+ \mu^-$ in proton-proton collisions at $\sqrt{s}=8$ TeV**

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.

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CXXXIII. **Measurement of differential cross sections for Z bosons produced in association with charm jets in pp collisions at $\sqrt{s}=13$ TeV**

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Ero J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

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CXXXIV. **Development and validation of HERWIG 7 tunes from CMS underlying-event measurements**

Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.81, no.4, 2021 (SCI-Expanded)

CXXXV. **Search for supersymmetry in final states with two oppositely charged same-flavor leptons and**

missing transverse momentum in proton-proton collisions at root s=13 TeV

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.4, 2021 (SCI-Expanded)

CXXXVI. Measurement of differential $t(\bar{t})$ over-bar production cross sections using top quarks at large transverse momenta in pp collisions at root s=13 TeV

Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

PHYSICAL REVIEW D, vol.103, no.5, 2021 (SCI-Expanded)

CXXXVII. Measurements of $p p \rightarrow Z Z$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s}=13\text{TeV}$

Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Valle A. E. D., Frühwirth R., Jeitler M., et al.

European Physical Journal C, vol.81, no.3, 2021 (SCI-Expanded)

CXXXVIII. Search for nonresonant Higgs boson pair production in final states with two bottom quarks and two photons in proton-proton collisions at root s=13 TeV

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.3, 2021 (SCI-Expanded)

CXXXIX. Search for new physics in top quark production with additional leptons in proton-proton collisions at root s=13 TeV using effective field theory

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.

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CXL. Search for dark photons in Higgs boson production via vector boson fusion in proton-proton collisions at root s=13 TeV

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.3, 2021 (SCI-Expanded)

CXLI. Measurement of the inclusive and differential Higgs boson production cross sections in the leptonic WW decay mode at p 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., Frühwirth R., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.3, 2021 (SCI-Expanded)

CXLII. Studies of charm and beauty hadron long-range correlations in pp and pPb collisions at LHC energies

Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Frühwirth R., et al.

PHYSICS LETTERS B, vol.813, 2021 (SCI-Expanded)

CXLIII. The very forward CASTOR calorimeter of the CMS experiment

Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Frühwirth R., et al.

JOURNAL OF INSTRUMENTATION, vol.16, no.2, 2021 (SCI-Expanded)

CXLIV. Search for top squark pair production using dilepton final states in pp collision data collected at $\sqrt{s}=13\text{TeV}$

Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Valle A. E. D., Frühwirth R., Jeitler M., et al.

European Physical Journal C, vol.81, no.1, 2021 (SCI-Expanded)

CXLV. Measurements of production cross sections of polarized same-sign W boson pairs in association with two jets in proton-proton collisions at root s=13 TeV

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M.,

Krammer N., et al.

PHYSICS LETTERS B, vol.812, 2021 (SCI-Expanded)

CXLVI. Correlations of azimuthal anisotropy Fourier harmonics with subevent cumulants in pPb collisions at $\sqrt{s_{NN}}=8.16$ 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 C, vol.103, no.1, 2021 (SCI-Expanded)

CXLVII. Search for the lepton flavor violating decay $\tau \rightarrow 3 \mu$ in proton-proton collisions at $\sqrt{s}=13$ TeV

Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

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

CXLVIII. Evidence for Higgs boson decay to a pair of muons

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

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

CXLIX. Evidence for electroweak production of four charged leptons and two jets in proton-proton collisions at $\sqrt{s}=13$ TeV

Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

PHYSICS LETTERS B, vol.812, 2021 (SCI-Expanded)

CL. Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV

Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Valle A. E. D., Frühwirth R., Jeitler M., Krammer N., et al.

European Physical Journal C, vol.81, no.1, 2021 (SCI-Expanded)

CLI. Measurement of single-diffractive dijet production in proton-proton collisions at $\sqrt{s}=8$ TeV with the CMS and TOTEM experiments

Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Valle A. E. D., et al.

European Physical Journal C, vol.80, no.12, 2020 (SCI-Expanded)

CLII. Inclusive search for highly boosted Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=13$ TeV

Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.12, 2020 (SCI-Expanded)

CLIII. Observation of electroweak production of W gamma with two jets in proton-proton collisions at $\sqrt{s}=13$ TeV

Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

PHYSICS LETTERS B, vol.811, 2020 (SCI-Expanded)

CLIV. 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., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.12, 2020 (SCI-Expanded)

CLV. 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., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.

PHYSICAL REVIEW D, vol.102, no.11, 2020 (SCI-Expanded)

- CLVI. **Measurements of the W boson rapidity, helicity, double-differential cross sections, and charge asymmetry in pp collisions at root s=13 TeV**
 Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
 PHYSICAL REVIEW D, vol.102, no.9, 2020 (SCI-Expanded)
- CLVII. **Search for decays of the 125 GeV Higgs boson into a Z boson and a rho or phi meson**
 Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
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- CLVIII. **Evidence for Top Quark Production in Nucleus-Nucleus Collisions**
 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.22, 2020 (SCI-Expanded)
- CLIX. **Measurement of the top quark Yukawa coupling from $t(\bar{t})$ over-bar kinematic distributions in the dilepton final state in proton-proton collisions at root s=13 TeV**
 Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
 PHYSICAL REVIEW D, vol.102, no.9, 2020 (SCI-Expanded)
- CLX. **W+ W- boson pair production 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.
 PHYSICAL REVIEW D, vol.102, no.9, 2020 (SCI-Expanded)
- CLXI. **Investigation into the event-activity dependence of gamma(nS) relative production in proton-proton collisions at root s=7 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.
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- CLXII. **Measurement of B-c(2S)(+) and B-c*(2S)(+) cross section ratios 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.
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- CLXIII. **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)
- CLXIV. **Observation of the B-s(0) -> X(3872)phi Decay**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.
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- CLXV. **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., 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)
- CLXVI. **Performance of the CMS Level-1 trigger in proton-proton collisions at root s=13 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Arnold B., Bergauer H., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., et al.
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- CLXVII. **Measurements of production cross sections of WZ and same-sign WW boson pairs in association**

with two jets in proton-proton collisions at root s=13 TeV

Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

PHYSICS LETTERS B, vol.809, 2020 (SCI-Expanded)

CLXVIII. Observation of the Production of Three Massive Gauge Bosons 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., Frühwirth R., et al.

PHYSICAL REVIEW LETTERS, vol.125, no.15, 2020 (SCI-Expanded)

CLXIX. 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., Ambrogi 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)

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

Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.9, 2020 (SCI-Expanded)

CLXXI. Measurement of the Y(1S) pair production cross section and search for resonances decaying to Y(1S) $\mu^{+}\mu^{-}$ in proton-proton collisions at root s=13 TeV

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

PHYSICS LETTERS B, vol.808, 2020 (SCI-Expanded)

CLXXII. Pileup mitigation at CMS in 13 TeV data

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 INSTRUMENTATION, vol.15, no.9, 2020 (SCI-Expanded)

CLXXIII. 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., Ambrogi 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)

CLXXIV. 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, vol.2020, no.8, 2020 (SCI-Expanded)

CLXXV. Study of central exclusive $\pi^{+}\pi^{-}$ production in proton-proton collisions at root s=5.02 and 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.

EUROPEAN PHYSICAL JOURNAL C, vol.80, no.8, 2020 (SCI-Expanded)

CLXXVI. Search for physics beyond the standard model in events with jets and two same-sign or at least three charged leptons 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., Frühwirth R., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.80, no.8, 2020 (SCI-Expanded)

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

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

PHYSICAL REVIEW LETTERS, vol.125, no.6, 2020 (SCI-Expanded)

- CLXXVIII. **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)
- CLXXIX. **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., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.8, 2020 (SCI-Expanded)
- CLXXX. **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., Frühwirth R., Jeitler M., et al.
PHYSICAL REVIEW D, vol.102, no.3, 2020 (SCI-Expanded)
- CLXXXI. **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.
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- CLXXXII. **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, vol.2020, no.7, 2020 (SCI-Expanded)
- CLXXXIII. **Measurement of the cross section for t(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., Frühwirth R., et al.
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- CLXXXIV. **Measurement of t(t)over-bar normalised multi-differential cross sections in pp collisions at root s=13 TeV, and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions**
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.
EUROPEAN PHYSICAL JOURNAL C, vol.80, no.7, 2020 (SCI-Expanded)
- CLXXXV. **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., Frühwirth R., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.7, 2020 (SCI-Expanded)
- CLXXXVI. **Search for disappearing tracks in proton-proton collisions at root s=13 TeV**
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
PHYSICS LETTERS B, vol.806, 2020 (SCI-Expanded)
- CLXXXVII. **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., Ero J., Del Valle A. E., et al.
PHYSICAL REVIEW C, vol.101, no.6, 2020 (SCI-Expanded)
- LXXXVIII. **Measurements with silicon photomultipliers of dose-rate effects in the radiation damage of plastic scintillator tiles in the CMS hadron endcap calorimeter**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del

Valle A. E., et al.

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

- CLXXXIX. **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, vol.2020, no.6, 2020 (SCI-Expanded)

- CXC. **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, vol.2020, no.6, 2020 (SCI-Expanded)

- CXCI. **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)

- CXCII. **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)

- CXCIII. **Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in PbPb collisions at root s(NN)=2.76 and 5.02 TeV**

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

EUROPEAN PHYSICAL JOURNAL C, vol.80, no.6, 2020 (SCI-Expanded)

- CXCIV. **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)

- CXCV. **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, vol.2020, no.6, 2020 (SCI-Expanded)

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

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

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

- CXCVII. **Calibration of the CMS hadron calorimeters using proton-proton collision data at root s=13 TeV**

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

- CXCVIII. **Study of J/psi meson production inside jets in pp collisions at N root s=8 TeV The CM Collaboration**

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.804, 2020 (SCI-Expanded)

- CXCIX. **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, vol.2020, no.5, 2020 (SCI-Expanded)

- CC. **Search for high mass dijet resonances with a new background prediction method in proton-proton collisions at root s=13 TeV**

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

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

- CCII. **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)

- CCII. **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, vol.2020, no.5, 2020 (SCI-Expanded)

- CCIII. **Experimental study of different silicon sensor options for the upgrade of the CMS Outer Tracker**

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

JOURNAL OF INSTRUMENTATION, vol.15, no.4, 2020 (SCI-Expanded)

- CCIV. **Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at root s=13 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.4, 2020 (SCI-Expanded)

- CCV. **Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at root s=13 TeV**

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

PHYSICAL REVIEW LETTERS, vol.124, no.13, 2020 (SCI-Expanded)

- CCVI. **Production of Lambda(+) (c) baryons in proton-proton and lead-lead collisions at root S=5.02 TeV**

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

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

- CCVII. **Constraints on the chi(c1) versus chi(c2) Polarizations in Proton-Proton Collisions at root s=8 TeV**

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

PHYSICAL REVIEW LETTERS, vol.124, no.16, 2020 (SCI-Expanded)

- CCVIII. **Measurement of the t(t)over-bar(b)over-bar production cross section in the all-jet final state in pp collisions at root s=13 TeV**

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

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

- CCIX. **Study of excited Lambda(0)(b) states decaying to Lambda(0)(b)pi(+)pi(-) 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.803, 2020 (SCI-Expanded)

- CCX. **Measurement of properties of $B(s)(0)s \rightarrow \mu^{(+)}\mu^{(-)}$ decays and search for $B^0 \rightarrow \mu^{(+)}\mu^{(-)}$ with the CMS experiment**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A. E., Flechl M., et al.
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- CCXI. **Running of the top quark mass from proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A. E., Flechl M., et al.
PHYSICS LETTERS B, vol.803, 2020 (SCI-Expanded)
- CCXII. **A multi-dimensional search for new heavy resonances decaying to boosted WW, WZ, or ZZ boson pairs in the dijet final state at 13TeV**
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.
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- CCXIII. **Search for direct pair production of supersymmetric partners to the tau lepton in proton-proton collisions at root s=13TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A. E., Flechl M., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.80, no.3, 2020 (SCI-Expanded)
- CCXIV. **Search for supersymmetry in pp collisions at root s=13 TeV with 137 fb⁻¹ in final states with a single lepton using the sum of masses of large-radius jets**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Eroo J., Del Valle A. E., Flechl M., Fruehwirth R., et al.
PHYSICAL REVIEW D, vol.101, no.5, 2020 (SCI-Expanded)
- CCXV. **Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at root s=13TeV**
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, vol.2020, no.3, 2020 (SCI-Expanded)
- CCXVI. **A search for the standard model Higgs boson decaying to charm quarks**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Eroo J., Del Valle A. E., Flechl M., Fruehwirth R., et al.
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- CCXVII. **Search for lepton flavour violating decays of a neutral heavy Higgs boson to mu tau and e tau in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A. E., Flechl M., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)
- CCXVIII. **Search for a heavy Higgs boson decaying to a pair of W bosons in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A. E., Flechl M., et al.
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- CCXIX. **Search for physics beyond the standard model in multilepton final states in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Eroo J., Del Valle A. E., Flechl M., Fruehwirth R., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)
- CCXX. **Search for a heavy pseudoscalar Higgs boson decaying into a 125 GeV Higgs boson and a Z boson in final states with two tau and two light leptons at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A.

E., Flechl M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)

- CCXXI. **Search for new neutral Higgs bosons through the $H \rightarrow Z A \rightarrow l^+ l^- b \bar{b}$ process in pp collisions at $\sqrt{s}=13$ TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)

- CCXXII. **Measurement of top quark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.3, 2020 (SCI-Expanded)

- CCXXIII. **Bose-Einstein correlations of charged hadrons in proton-proton collisions at $\sqrt{s}=13$ TeV**

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, vol.2020, no.3, 2020 (SCI-Expanded)

- CCXXIV. **Observation of the $\Lambda(0)(b) \rightarrow J/\psi \Lambda \phi$ decay in proton-proton collisions at $\sqrt{s}=13$ TeV**

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.

PHYSICS LETTERS B, vol.802, 2020 (SCI-Expanded)

- CCXXV. **Combined search for supersymmetry with photons in proton-proton collisions at $\sqrt{s}=13$ TeV**

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.

PHYSICS LETTERS B, vol.801, 2020 (SCI-Expanded)

- CCXXVI. **Measurement of the top quark pair production cross section in dilepton final states containing one tau lepton in pp collisions at $\sqrt{s}=13$ TeV**

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, vol.2020, no.2, 2020 (SCI-Expanded)

- CCXXVII. **Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at $\sqrt{s}=13$ TeV**

Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Dragicevic M., Eroo J., Del Valle A. E., Flechl M., Fruehwirth R., et al.

JOURNAL OF INSTRUMENTATION, vol.15, no.2, 2020 (SCI-Expanded)

- CCXXVIII. **Search for top squark pair production in a final state with two tau leptons in proton-proton collisions at $\sqrt{s}=13$ TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.2, 2020 (SCI-Expanded)

- CCXXIX. **Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at $\sqrt{s}=13$ TeV**

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

EUROPEAN PHYSICAL JOURNAL C, vol.80, no.2, 2020 (SCI-Expanded)

- CCXXX. **Searches for physics beyond the standard model with the MT2 variable in hadronic final states with and without disappearing tracks in proton-proton collisions at $\sqrt{s}=13$ TeV**

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

EUROPEAN PHYSICAL JOURNAL C, vol.80, no.1, 2020 (SCI-Expanded)

- CCXXXI. **Measurement of electroweak production of a W boson in association with two jets in proton-proton collisions at $\sqrt{s}=13$ TeV**

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

EUROPEAN PHYSICAL JOURNAL C, vol.80, no.1, 2020 (SCI-Expanded)

- CCXXXII. **Measurement of the single top quark and antiquark production cross sections in the t channel and their ratio 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.

PHYSICS LETTERS B, vol.800, 2020 (SCI-Expanded)

- CCXXXIII. **Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements**

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

EUROPEAN PHYSICAL JOURNAL C, vol.80, no.1, 2020 (SCI-Expanded)

- CCXXXIV. **Search for light pseudoscalar boson pairs produced from decays of the 125 GeV Higgs boson in final states with two muons and two nearby tracks in pp collisions at $\sqrt{s}=13$ 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.

PHYSICS LETTERS B, vol.800, 2020 (SCI-Expanded)

- CCXXXV. **Search for Supersymmetry with a Compressed Mass Spectrum in Events with a Soft tau Lepton, a Highly Energetic Jet, and Large Missing Transverse Momentum in Proton-Proton Collisions at $\sqrt{s}=13$ TeV**

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

PHYSICAL REVIEW LETTERS, vol.124, no.4, 2020 (SCI-Expanded)

- CCXXXVI. **Evidence for WW production from double-parton interactions in proton-proton collisions at $\sqrt{s}=13$ TeV**

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

EUROPEAN PHYSICAL JOURNAL C, vol.80, no.1, 2020 (SCI-Expanded)

- CCXXXVII. **Multiparticle correlation studies in pPb collisions $\sqrt{s_{NN}}=8.16$ 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.

PHYSICAL REVIEW C, vol.101, no.1, 2020 (SCI-Expanded)

- CCXXXVIII. **Search for a charged Higgs boson decaying into top and bottom quarks in events with electrons or muons in proton-proton collisions at $\sqrt{s}=13$ TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.1, 2020 (SCI-Expanded)

- CCXXXIX. **Search for electroweak production of a vector-like T quark using fully hadronic final states**

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

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.1, 2020 (SCI-Expanded)

- CCXL. **Observation of nuclear modifications in W-+/- boson production in pPb collisions at $\sqrt{s_{NN}}=8.16$ TeV**

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

PHYSICS LETTERS B, vol.800, 2020 (SCI-Expanded)

- CCXLI. **Search for long-lived particles using delayed photons in proton-proton collisions at $\sqrt{s}=13$ TeV**

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

- E., Flechl M., et al.
PHYSICAL REVIEW D, vol.100, no.11, 2019 (SCI-Expanded)
- CCXLII. **Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at root s=13 Tev**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., Flechl M., et al.
PHYSICAL REVIEW D, vol.100, no.11, 2019 (SCI-Expanded)
- CCXLIII. **Search for Low-Mass Quark-Antiquark Resonances Produced in Association with a Photon at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., et al.
PHYSICAL REVIEW LETTERS, vol.123, no.23, 2019 (SCI-Expanded)
- CCXLIV. **Measurements of differential Z boson production cross sections in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2019 (SCI-Expanded)
- CCXLV. **Search for Physics beyond the Standard Model in Events with Overlapping Photons and Jets**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., Flechl M., et al.
PHYSICAL REVIEW LETTERS, vol.123, no.24, 2019 (SCI-Expanded)
- CCXLVI. **Measurement of the differential Drell-Yan cross section in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2019 (SCI-Expanded)
- CCXLVII. **Study of the $B^+ \rightarrow J/\psi(\Lambda_b)\text{over-bar}p$ decay in proton-proton collisions at root s=8 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., Flechl M., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2019 (SCI-Expanded)
- CCXLVIII. **Constraints on anomalous HVV couplings from the production of Higgs bosons decaying to tau lepton pairs**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., et al.
PHYSICAL REVIEW D, vol.100, no.11, 2019 (SCI-Expanded)
- CCXLIX. **Search for anomalous triple gauge couplings in WW and WZ production in lepton plus jet events in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., et al.
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- CCL. **Pseudorapidity distributions of charged hadrons in xenon-xenon collisions at root S-NN=5.44 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.799, 2019 (SCI-Expanded)
- CCLI. **Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., Flechl M., et al.
PHYSICS LETTERS B, vol.798, 2019 (SCI-Expanded)
- CCLII. **Search for new physics in top quark production in dilepton final states in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del

Valle A. E., et al.

European Physical Journal C, vol.79, no.11, 2019 (SCI-Expanded)

CCLIII. Search for anomalous electroweak production of vector boson pairs in association with two jets in proton-proton collisions at 13 TeV

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

PHYSICS LETTERS B, vol.798, 2019 (SCI-Expanded)

CCLIV. Measurements of triple-differential cross sections for inclusive isolated-photon+jet events in p p collisions at $\sqrt{s}=8\text{TeV}$

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

European Physical Journal C, vol.79, no.11, 2019 (SCI-Expanded)

CCLV. Measurement of the average very forward energy as a function of the track multiplicity at central pseudorapidities in proton-proton collisions at $\sqrt{s}=13\text{TeV}$

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

European Physical Journal C, vol.79, no.11, 2019 (SCI-Expanded)

CCLVI. Search for MSSM Higgs bosons decaying to $\mu^{+}\mu^{-}$ in proton-proton collisions at $\sqrt{s}=13\text{TeV}$

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

PHYSICS LETTERS B, vol.798, 2019 (SCI-Expanded)

CCLVII. Search for the production of four top quarks in the single -lepton and opposite -sign dilepton final states in proton -proton collisions at $\sqrt{s}=13\text{TeV}$

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

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

CCLVIII. Search for supersymmetry using Higgs boson to diphoton decays at $\sqrt{s}=13\text{TeV}$

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

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

CCLIX. Search for dark photons in decays of Higgs bosons produced in association with Z bosons in proton-proton collisions at $\sqrt{s}=13\text{TeV}$

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

JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2019 (SCI-Expanded)

CCLX. Search for resonances decaying to a pair of Higgs bosons in the $b(b)\overline{b}(q)\overline{b}$ final state in proton-proton collisions at $\sqrt{s}=13\text{TeV}$

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

JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2019 (SCI-Expanded)

CCLXI. Charged-particle angular correlations in XeXe collisions at $\sqrt{s_{NN}}=5.44\text{TeV}$

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

PHYSICAL REVIEW C, vol.100, no.4, 2019 (SCI-Expanded)

CCLXII. Measurement of the top quark polarization and $t(t)\overline{t}$ spin correlations using dilepton final states in proton-proton collisions at $\sqrt{s}=13\text{TeV}$

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

PHYSICAL REVIEW D, vol.100, no.7, 2019 (SCI-Expanded)

CCLXIII. Evidence for light-by-light scattering and searches for axion-like particles in ultraperipheral PbPb collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$

- Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
PHYSICS LETTERS B, vol.797, 2019 (SCI-Expanded)
- CCLXIV. **Search for Higgs and Z boson decays to J/psi or Y pairs in the four-muon final state in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
PHYSICS LETTERS B, vol.797, 2019 (SCI-Expanded)
- CCLXV. **Search for pair production of vectorlike quarks in the fully hadronic final state**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
PHYSICAL REVIEW D, vol.100, no.7, 2019 (SCI-Expanded)
- CCLXVI. **Measurement of the top quark Yukawa coupling from t(t)over-bar kinematic distributions in the lepton plus jets final state in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICAL REVIEW D, vol.100, no.7, 2019 (SCI-Expanded)
- CCLXVII. **Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
PHYSICS LETTERS B, vol.797, 2019 (SCI-Expanded)
- CCLXVIII. **Measurement of B-s(0) meson production in pp and PbPb collisions at root S-NN=5.02 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.796, pp.168-190, 2019 (SCI-Expanded)
- CCLXIX. **Search for a Light Charged Higgs Boson Decaying to a W Boson and a CP-Odd Higgs Boson in Final States with e mu mu or mu mu mu in Proton-Proton Collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
PHYSICAL REVIEW LETTERS, vol.123, no.13, 2019 (SCI-Expanded)
- CCLXX. **Azimuthal separation in nearly back-to-back jet topologies in inclusive 2- and 3-jet events in pp 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.
European Physical Journal C, vol.79, no.9, 2019 (SCI-Expanded)
- CCLXXI. **A search for pair production of new light bosons decaying into muons in proton-proton collisions at 13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.796, pp.131-154, 2019 (SCI-Expanded)
- CCLXXII. **Search for vectorlike leptons in multilepton final states in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICAL REVIEW D, vol.100, no.5, 2019 (SCI-Expanded)
- CCLXXIII. **Measurement of electroweak WZ boson production and search for new physics in WZ plus two jets events in pp collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.795, pp.281-307, 2019 (SCI-Expanded)
- CCLXXIV. **Centrality and pseudorapidity dependence of the transverse energy density in pPb 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., Ero J., et al.

PHYSICAL REVIEW C, vol.100, no.2, 2019 (SCI-Expanded)

- CCLXXV. **Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state with two muons and two b quarks in pp collisions at 13 TeV**

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

PHYSICS LETTERS B, vol.795, pp.398-423, 2019 (SCI-Expanded)

- CCLXXVI. **Search for supersymmetry with a compressed mass spectrum in the vector boson fusion topology with 1-lepton and 0-lepton final states in proton-proton collisions at p root s=13 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2019 (SCI-Expanded)

- CCLXXVII. **Search for dark matter in events with a leptoquark and missing transverse momentum in proton-proton collisions at 13 TeV**

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

PHYSICS LETTERS B, vol.795, pp.76-99, 2019 (SCI-Expanded)

- :CLXXVIII. **Measurement of exclusive $\rho(770)^0$ photoproduction in ultraperipheral pPb collisions at $\sqrt{s_{NN}}=5.02\text{ TeV}$**

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.

European Physical Journal C, vol.79, no.8, 2019 (SCI-Expanded)

- CCLXXIX. **Performance of missing transverse momentum reconstruction in proton-proton collisions at root s=13 TeV using the CMS detector**

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 INSTRUMENTATION, vol.14, 2019 (SCI-Expanded)

- CCLXXX. **Search for the production of (WWW -/+)-W-+/-W-+/- events 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.100, no.1, 2019 (SCI-Expanded)

- CCLXXXI. **Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at $\sqrt{s}=13\text{ TeV}$**

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

European Physical Journal C, vol.79, no.7, 2019 (SCI-Expanded)

- CCLXXXII. **Search for charged Higgs bosons in the $H\rightarrow\tau^+\tau^-\rightarrow\tau^+(\tau^-\nu(\tau^-))$ decay channel in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$**

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, 2019 (SCI-Expanded)

- :CLXXXIII. **An embedding technique to determine tau tau backgrounds in proton-proton collision data**

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 INSTRUMENTATION, vol.14, 2019 (SCI-Expanded)

- :CLXXXIV. **Search for invisible decays of a Higgs boson produced through vector boson fusion in proton-proton collisions at root s=13 TeV**

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

PHYSICS LETTERS B, vol.793, pp.520-551, 2019 (SCI-Expanded)

- CCLXXXV. **Search for supersymmetry in final states with photons and missing transverse momentum in proton-proton collisions at 13 TeV**
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2019 (SCI-Expanded)
- CLXXXVI. **Measurements of the Higgs boson width and anomalous HVV couplings from on-shell and off-shell production in the four-lepton final state**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.
PHYSICAL REVIEW D, vol.99, no.11, 2019 (SCI-Expanded)
- CLXXXVII. **Measurement and interpretation of differential cross sections for Higgs boson production at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Escalante Del Valle A., et al.
PHYSICS LETTERS B, vol.792, pp.369-396, 2019 (SCI-Expanded)
- LXXXVIII. **Measurement of the $t\bar{t}$ production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at $\sqrt{s}=13\text{ TeV}$**
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.
European Physical Journal C, vol.79, no.5, 2019 (SCI-Expanded)
- CLXXXIX. **Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.79, no.5, 2019 (SCI-Expanded)
- CCXC. **Search for a low-mass $\tau(-)\tau(+)$ resonance in association with a bottom quark in proton-proton collisions at root s=13 TeV**
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2019 (SCI-Expanded)
- CCXCI. **Measurement of inclusive very forward jet cross sections in proton-lead collisions at p sNN=5:02 TeV**
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2019 (SCI-Expanded)
- CCXCII. **Search for an L-mu - L-tau gauge boson using $Z \rightarrow 4\mu$ events in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.792, pp.345-368, 2019 (SCI-Expanded)
- CCXCIII. **Search for supersymmetry in events with a photon, jets, b -jets, and missing transverse momentum in proton-proton collisions at 13 TeV**
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Del Valle A. E., et al.
European Physical Journal C, vol.79, no.5, 2019 (SCI-Expanded)
- CCXCIV. **Combinations of single-top-quark production cross-section measurements and vertical bar f(LV)V(tb)vertical bar determinations at root s=7 and 8 TeV with the ATLAS and CMS experiments**
Aaboud M., Aad G., Abbott B., Abbott D., Abidinov O., Abed Abud A., Abhayasinghe D., Abidi S., AbouZeid O., Abraham N., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2019 (SCI-Expanded)
- CCXCV. **Combined measurements of Higgs boson couplings in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$**

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

European Physical Journal C, vol.79, no.5, 2019 (SCI-Expanded)

CCXCVI. Observation of Single Top Quark Production in Association with a Z Boson 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.

PHYSICAL REVIEW LETTERS, vol.122, no.13, 2019 (SCI-Expanded)

CCXCVII. Search for contact interactions and large extra dimensions in the dilepton mass spectra from proton-proton collisions at $\sqrt{s}=13$ TeV

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

JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2019 (SCI-Expanded)

CCXCVIII. Measurement of the top quark mass in the all-jets final state at $\sqrt{s}=13$ TeV and combination with the lepton+jets channel

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.

European Physical Journal C, vol.79, no.4, 2019 (SCI-Expanded)

CCXCIX. Search for nonresonant Higgs boson pair production in the $b(b)\text{over-bar}b(b)\text{over-bar}$ final state at $\sqrt{s}=13$ TeV

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

JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2019 (SCI-Expanded)

CCC. Observation of Two Excited B-c(+) States and Measurement of the B-c(+) (2S) Mass in pp Collisions at $\sqrt{s}=13$ TeV

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

PHYSICAL REVIEW LETTERS, vol.122, no.13, 2019 (SCI-Expanded)

CCCI. Measurements of properties of the Higgs boson decaying to a W boson pair in pp collisions at $\sqrt{s}=13$ TeV

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

PHYSICS LETTERS B, vol.791, pp.96-129, 2019 (SCI-Expanded)

CCCII. Search for W Boson Decays to Three Charged Pions

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

PHYSICAL REVIEW LETTERS, vol.122, no.15, 2019 (SCI-Expanded)

CCCIII. Jet Shapes of Isolated Photon-Tagged Jets in Pb-Pb and pp Collisions at $\sqrt{s_{NN}}=5.02$ TeV

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

PHYSICAL REVIEW LETTERS, vol.122, no.15, 2019 (SCI-Expanded)

CCCIV. Observation of prompt J/psi meson elliptic flow in high-multiplicity pPb collisions at $\sqrt{s_{NN}}=8.16$ TeV

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

PHYSICS LETTERS B, vol.791, pp.172-194, 2019 (SCI-Expanded)

CCCV. Search for resonant production of second-generation sleptons with same-sign dimuon events 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.

European Physical Journal C, vol.79, no.4, 2019 (SCI-Expanded)

- CCCVI. **Measurements of the pp WZ inclusive and differential production cross sections and constraints on charged anomalous triple gauge couplings at $\sqrt{s}=13$ TeV**
 Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.
 JOURNAL OF HIGH ENERGY PHYSICS, no.4, 2019 (SCI-Expanded)
- CCCVII. **Search for pair production of first-generation scalar leptoquarks at root $\sqrt{s}=13$ TeV**
 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.
 PHYSICAL REVIEW D, vol.99, no.5, 2019 (SCI-Expanded)
- CCCVIII. **Inclusive search for supersymmetry in pp collisions at root $\sqrt{s}=13$ TeV using razor variables and boosted object identification in zero and one lepton final states**
 Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.
 JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2019 (SCI-Expanded)
- CCCIX. **Search for Narrow H gamma Resonances in Proton-Proton Collisions at root $\sqrt{s}=13$ TeV**
 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.
 PHYSICAL REVIEW LETTERS, vol.122, no.8, 2019 (SCI-Expanded)
- CCCX. **Search for dark matter produced in association with a single top quark or a top quark pair in proton-proton collisions at $\sqrt{s}=13$ TeV**
 Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.
 JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2019 (SCI-Expanded)
- CCCXI. **Measurement of associated production of a W boson and a charm quark in proton-proton collisions at $\sqrt{s}=13$ TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Escalante Del Valle A., et al.
 European Physical Journal C, vol.79, no.3, 2019 (SCI-Expanded)
- CCCXII. **Search for supersymmetric partners of electrons and muons in proton-proton collisions at root $\sqrt{s}=13$ TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
 PHYSICS LETTERS B, vol.790, pp.140-166, 2019 (SCI-Expanded)
- CCCXIII. **Combination of Searches for Higgs Boson Pair Production in Proton-Proton Collisions at root $\sqrt{s}=13$ TeV**
 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.
 PHYSICAL REVIEW LETTERS, vol.122, no.12, 2019 (SCI-Expanded)
- CCCXIV. **Search for the pair production of light top squarks in the $e(+/-)\mu(-/+)$ final state in proton-proton collisions at root $\sqrt{s}=13$ TeV**
 Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.
 JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2019 (SCI-Expanded)
- CCCXV. **Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton-proton collisions at $\sqrt{s}=13$ TeV**
 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.
 European Physical Journal C, vol.79, no.3, 2019 (SCI-Expanded)
- CCCXVI. **Measurement of prompt $\psi(2S)$ production cross sections in proton-lead and proton-proton collisions at root $\sqrt{s(NN)}=5.02$ TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic

- M., Eroee J., et al.
PHYSICS LETTERS B, vol.790, pp.509-532, 2019 (SCI-Expanded)
- CCCXVII. **Search for a W boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state**
Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2019 (SCI-Expanded)
- CCCXVIII. **Search for long-lived particles decaying into displaced jets in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., et al.
PHYSICAL REVIEW D, vol.99, no.3, 2019 (SCI-Expanded)
- CCCXIX. **Search for new particles decaying to a jet and an emerging jet**
Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2019 (SCI-Expanded)
- CCCXX. **Study of the underlying event in top quark pair production in p p collisions at 13 Te**
Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.
European Physical Journal C, vol.79, no.2, 2019 (SCI-Expanded)
- CCCXXI. **Measurements of $t\bar{t}$ differential cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV using events containing two leptons**
Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2019 (SCI-Expanded)
- CCCXXII. **Fragmentation of J/psi in jets in pp collisions at $\sqrt{s}=5.02$ TeV** **Batoul Diab for the CMS collaboration**
Diab B., Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., et al.
NUCLEAR PHYSICS A, vol.982, pp.186-188, 2019 (SCI-Expanded)
- CCCXXIII. **Beyond nPDFs effects : Prompt J/psi and psi(2S) production in pPb and pp collisions**
Oh G., Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., et al.
NUCLEAR PHYSICS A, vol.982, pp.743-746, 2019 (SCI-Expanded)
- CCCXXIV. **Search for rare decays of Z and Higgs bosons to J / ψ and a photon in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., Del Valle A. E., et al.
European Physical Journal C, vol.79, no.2, 2019 (SCI-Expanded)
- CCCXXV. **Measurement of anisotropic flow in XeXe collisions at 5.44 TeV with the CMS experiment**
Stojanovic M., Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., et al.
NUCLEAR PHYSICS A, vol.982, pp.395-398, 2019 (SCI-Expanded)
- CCCXXVI. **CMS Collaboration**
Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.
Nuclear Physics A, vol.982, pp.1010-1035, 2019 (SCI-Expanded)
- CCCXXVII. **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**
Shi Z., Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroee J., et al.

NUCLEAR PHYSICS A, vol.982, pp.647-650, 2019 (SCI-Expanded)

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

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.

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

CCCXXIX. **Search for single production of vector-like quarks decaying to a top quark and a W boson in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**

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.

European Physical Journal C, vol.79, no.2, 2019 (SCI-Expanded)

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

Tu Z., Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., et al.

NUCLEAR PHYSICS A, vol.982, pp.527-530, 2019 (SCI-Expanded)

CCCXXXI. **Evidence for light-by-light scattering in ultraperipheral PbPb collisions at root S-NN=5.02 TeV**

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NUCLEAR PHYSICS A, vol.982, pp.791-794, 2019 (SCI-Expanded)

CCCXXXII. **Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.2, 2019 (SCI-Expanded)

:CCXXIII. **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., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., et al.

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:CCXXIV. **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., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroo J., Del Valle A. E., et al.

PHYSICS LETTERS B, vol.789, pp.19-44, 2019 (SCI-Expanded)

CCCXXXV. **Search for production of Higgs boson pairs in the four b quark final state using large-area jets in proton-proton collisions at root s 13 TeV**

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

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:CCXXVI. **Measurement of inclusive and differential Higgs boson production cross sections in the diphoton decay channel in proton-proton collisions at root s=13 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2019 (SCI-Expanded)

CCXXVII. **Measurement of differential cross sections for inclusive isolated-photon and photon+jet production in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**

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

European Physical Journal C, vol.79, no.1, 2019 (SCI-Expanded)

:CXXVIII. **Search for heavy Majorana neutrinos in same-sign dilepton channels in proton-proton collisions at root s=13 TeV**

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

- JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2019 (SCI-Expanded)
- 1CCXXXIX. **Search for low-mass resonances decaying into bottom quark-antiquark pairs in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.
PHYSICAL REVIEW D, vol.99, no.1, 2019 (SCI-Expanded)
- CCCXL. **Search for Dark Matter Particles Produced in Association with a Top Quark Pair at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.
PHYSICAL REVIEW LETTERS, vol.122, no.1, 2019 (SCI-Expanded)
- CCCXLI. **Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in proton-proton collisions at root s=13 TeV**
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Erö J., Escalante Del Valle A., et al.
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- CCCXLII. **Search for pair-produced three-jet resonances in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.
PHYSICAL REVIEW D, vol.99, no.1, 2019 (SCI-Expanded)
- CCCXLIII. **Search for the Higgs Boson Decaying to Two Muons in Proton-Proton Collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
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- CCCXLIV. **Search for vector-like quarks in events with two oppositely charged leptons 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., Dragicevic M., Ero J., Escalante Del Valle A., et al.
European Physical Journal C, vol.79, no.4, 2019 (SCI-Expanded)
- CCCXLV. **Search for pair-produced resonances decaying to quark pairs in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.
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- CCCXLVI. **Angular analysis of the decay $B^+ \rightarrow K^+ \mu^+ \mu^-$ in proton-proton collisions at root s=8 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
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- CCCXLVII. **Search for Leptoquarks Coupled to Third-Generation Quarks in Proton-Proton Collisions at root s=13 TeV**
Sirunyan A. M., Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., et al.
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- CCXLVIII. **Event shape variables measured using multijet final states in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Ero J., Del Valle A. E., et al.
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- CCCXLIX. **Search for the decay of a Higgs boson in the $\ell\ell\gamma$ channel in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
Journal of High Energy Physics, vol.2018, no.11, 2018 (SCI-Expanded)

- CCCL. **Studies of $B_s^{*}(5840)0$ and $B_s(5830)0$ mesons including the observation of the $B_s^{*}(5840)0 \rightarrow B0K_S0$ decay in proton-proton collisions at $\sqrt{s}=8\text{TeV}$**
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- CCCLI. **Measurements of the differential jet cross section as a function of the jet mass in dijet events from proton-proton collisions at $\sqrt{s}=13\text{ TeV}$**
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- CCCLII. **Search for resonances in the mass spectrum of muon pairs produced in association with b quark jets in proton-proton collisions at root 8 and 13 TeV**
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.
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- CCCLIII. **Measurement of jet substructure observables in $t(\bar{t})$ events from proton-proton collisions at root $s=13\text{ TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
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- CCCLIV. **Searches for pair production of charginos and top squarks in final states with two oppositely charged leptons in proton-proton collisions at root $s=13\text{ TeV}$**
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- CCCLV. **Evidence for the Associated Production of a Single Top Quark and a Photon in Proton-Proton Collisions at root $s=13\text{ TeV}$**
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PHYSICAL REVIEW LETTERS, vol.121, no.22, 2018 (SCI-Expanded)
- CCCLVI. **Search for long-lived particles with displaced vertices in multijet events in proton-proton collisions at root $s=13\text{ TeV}$**
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 D, vol.98, no.9, 2018 (SCI-Expanded)
- CCCLVII. **Search for physics beyond the standard model in high-mass diphoton events from proton-proton collisions at root $s=13\text{ TeV}$**
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 D, vol.98, no.9, 2018 (SCI-Expanded)
- CCCLVIII. **Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos and b quarks at root $s=13\text{ TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
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- CCCLIX. **Search for a charged Higgs boson decaying to charm and bottom quarks in proton-proton collisions at root $s=8\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
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- CCCLX. **Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state of**

two muons and two tau leptons in proton-proton collisions at TeV

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

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

CCCLXI. Search for supersymmetry in events with a tau lepton pair and missing transverse momentum in proton-proton collisions at root s=13TeV

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

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CCCLXII. Search for black holes and sphalerons in high-multiplicity final states in proton-proton collisions a root s=13 TeVt

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

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

CCCLXIII. Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state with two bquarks and two tau leptons in proton-proton collisions at root s=13 TeV The CMS Collaboration

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

PHYSICS LETTERS B, vol.785, pp.462-488, 2018 (SCI-Expanded)

CCCLXIV. Precision measurement of the structure of the CMS inner tracking system using nuclear interactions

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

JOURNAL OF INSTRUMENTATION, vol.13, 2018 (SCI-Expanded)

CCCLXV. Measurement of the production cross section for single top quarks in association with W bosons in proton-proton collisions at root s=13 TeV

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

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

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

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

CCCLXVII. Performance of reconstruction and identification of tau leptons decaying to hadrons and nu(tau) in pp collisions at root s=13 TeV

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:CCLXVIII. Observation of the Z -> psi l(+)l(-) Decay in pp Collisions at root s=13 TeV

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

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

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

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

CCCLXX. Search for Pair-Produced Resonances Each Decaying into at Least Four Quarks in Proton-Proton Collisions at root s=13 TeV

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

PHYSICAL REVIEW LETTERS, vol.121, no.14, 2018 (SCI-Expanded)

- CCCLXXI. **Observation of Higgs Boson Decay to Bottom Quarks**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
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- CCCLXXII. **Search for dark matter produced in association with a Higgs boson decaying to gamma gamma or tau(+)tau(-) at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
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- CCCLXXIII. **Measurement of the weak mixing angle using the forward-backward asymmetry of Drell-Yan events in p p collisions at 8 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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- CCCLXXIV. **Search for top squarks decaying via four-body or chargino-mediated modes in single-lepton final states in proton-proton collisions at root s=13 TeV**
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- CCCLXXV. **Measurement of charged particle spectra in minimum-bias events from proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
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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- CCCLXXVI. **Search for vector-like T and B quark pairs in final states with leptons at root s=13 TeV**
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- CCCLXXVII. **Elliptic Flow of Charm and Strange Hadrons in High-Multiplicity p plus Pb Collisions at root(NN)-N-s=8.16 TeV**
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- CCCLXXVIII. **Observation of the chi(b1)(3P) and chi(b2)(3P) and Measurement of their Masses**
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- CCCLXXIX. **Constraints on models of scalar and vector leptoquarks decaying to a quark and a neutrino at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
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- CCCLXXX. **Search for beyond the standard model Higgs bosons decaying into a b(b)over-bar pair in pp collisions at root s=13 TeV**
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Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.

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- CCLXXXII. **Constraining Gluon Distributions in Nuclei Using Dijets in Proton-Proton and Proton-Lead Collisions at root s(NN)=5.02 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
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- CLXXXIII. **Search for a singly produced third-generation scalar leptoquark decaying to a tau lepton and a bottom quark in proton-proton collisions at root s=13 TeV**
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- CLXXXIV. **Observation of (tt)over-barH Production**
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- CCLXXXV. **Tackling light higgsinos at the ILC**
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- CLXXXVII. **Tevatron Higgs mass bounds: Projecting U(1)' models to LHC domain**
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- I. **A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution**
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Erö J., Valle A. E. D., Flechl M., Frühwirth R., et al.
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Refereed Congress / Symposium Publications in Proceedings

- I. **CMS Run 2 high level trigger performance**
Sert H.
2019 European Physical Society Conference on High Energy Physics, EPS-HEP 2019, Ghent, Belgium, 10 - 17 July 2019, vol.364
- II. **CMS high level trigger performance in run 2**
Sert H.
27th Symposium on Nuclear Electronics and Computing, NEC 2019, Budva, Montenegro, 30 September - 04 October 2019, vol.2507, no.7425074, pp.58-64

Supported Projects

Özkorucuklu S., Sert H., Şahin Yalçın L., Çeliktaş C., Zorbilmez Ç., Hoş İ., Gürkan G., Işıldak B., Kaynak B., Aggez G., et al., Project Supported by Other Official Institutions, CMS Detektöründe Çok İleri Bölge Fizik Analizleri, İnkusif pp Etkileşimleri, PPS (Hassas Proton Spektrometresi) Hassas Zaman Ölçüm Detektörü ve HCAL (Hadronik Kalorimetre)

Faz 2. Güncelleme Çalışmaları, 2020 - 2023

ÖZKORUCUKLU S., SOYLAMIŞ A., ŞAHİN YALÇIN L., KAYNAK B., GÜRKAN G., SERT H., ZORBİLMEZ Ç., Project Supported by Higher Education Institutions, CERN CMS Deneyi Üyeliği Yüksek Enerji Fiziği ve Detektör Geliştirme Çalışmaları, 2018 - 2022

Student Project

Software Project, Labelling the Higgs Boson Production Mechanisms in Certain Decay Process by using Deep Learning Method, Istanbul University, Faculty Of Science, Department Of Physics, Turkey, 2022 - Continues

Metrics

Publication: 390

Citation (WoS): 3878

Citation (Scopus): 12519

H-Index (WoS): 28

H-Index (Scopus): 58

Non Academic Experience

CERN, The European Organization for Nuclear Research