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Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Fizik, Turkey 2012 - 2019

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Fizik, Turkey 2008 - 2012

Research Areas

Physics

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Study of time resolution measurements and prospects for energy resolution of an ultra-compact sampling calorimeter (RADiCAL) module at EM shower maximum over the energy range 25 GeV 150 GeV**
Perez-Lara C., Wetzel J., Akgun U., Anderson T., Barbera T., Blend D., Cankoçak K., Cerci S., Chigurupati N., Cox B., et al.
Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, vol.1068, 2024 (SCI-Expanded)
- II. **Observation of the $J/\psi \rightarrow \mu^+\mu^-\mu^+\mu^-$ decay in proton-proton collisions at $\sqrt{s}=13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
PHYSICAL REVIEW D, vol.109, no.11, 2024 (SCI-Expanded)
- III. **Search for pair production of scalar and vector leptoquarks decaying to muons and bottom quarks in proton-proton collisions at $\sqrt{s}=13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
PHYSICAL REVIEW D, vol.109, no.11, 2024 (SCI-Expanded)
- IV. **Search for long-lived particles using displaced vertices and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
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- V. **Search for W' bosons decaying to a top and a bottom quark in leptonic final states 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., Escalante Del Valle A., Hussain P. S., et al.
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- VI. **Search for flavor changing neutral current interactions of the top quark in final states with a photon and additional jets in proton-proton collisions at $\sqrt{s}=13$ TeV**
 Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
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- VII. **Observation of $WW\gamma$ Production and Search for $H\gamma$ 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.
 PHYSICAL REVIEW LETTERS, vol.132, no.12, 2024 (SCI-Expanded)
- VIII. **New Structures in the $J/\psi/\psi'$ Mass Spectrum 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.
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- IX. **Search for new Higgs bosons via same-sign top quark pair production in association with a jet in proton-proton collisions at $\sqrt{s}=13$ TeV**
 Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Hussain P., Jeitler M., et al.
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- X. **Search for dark matter particles in W^+W^- events with transverse momentum imbalance in proton-proton collisions at $\sqrt{s}=13$ TeV**
 Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
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- XI. **Search for Scalar Leptoquarks Produced via τ -Lepton-Quark Scattering in pp Collisions at $\sqrt{s}=13$ TeV**
 Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
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- XII. **Muon identification using multivariate techniques in the CMS experiment in proton-proton collisions at $\sqrt{s}=13$ TeV**
 Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Escalante Del Valle A., Hussain P., et al.
 JOURNAL OF INSTRUMENTATION, vol.19, no.2, 2024 (SCI-Expanded)
- XIII. **Search for Inelastic Dark Matter in Events with Two Displaced Muons and Missing Transverse Momentum in Proton-Proton Collisions at $\sqrt{s}=13$ TeV**
 Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., et al.
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- XIV. **Evidence for the Higgs Boson Decay to a Z Boson and a Photon at the LHC**
 Aad G., Abbott B., Abeling K., Abicht N., Abidi S., Aboulhorma A., Abramowicz H., Abreu H., Abulaiti Y., Acharya B., et al.
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- XV. **Measurement of the τ lepton polarization in Z boson decays in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- XVI. **Measurement of the Higgs boson production via vector boson fusion and its decay into bottom quarks 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.
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- XVII. **Luminosity determination using Z boson production at the CMS experiment**
Hayrapetyan A., Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Valle A. E. D., Hussain P., et al.
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- XVIII. **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.
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- XIX. **Feebly-interacting particles: FIPs 2022 Workshop Report**
Antel C., Battaglieri M., Beacham J., Boehm C., Buchmueller O., Calore F., Carenza P., Chauhan B., Clade P., Coloma P., et al.
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- XX. **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.
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- XXI. **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., Frühwirth R., Jeitler M., Krammer N., et al.
PHYSICAL REVIEW D, vol.108, no.9, 2023 (SCI-Expanded)
- XXII. **Search for new physics in multijet events with at least one photon and large missing transverse momentum in proton-proton collisions at 13 TeV**
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- XXIII. **Search for the lepton-flavor violating decay of the Higgs boson and additional Higgs bosons in the $e\mu$ 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.
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- XXIV. **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.
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- XXV. **Two-particle azimuthal correlations in γp interactions using pPb collisions at $s_{NN}=8.16$ 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.
Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, vol.844, 2023 (SCI-Expanded)
- XXVI. **Measurement of differential cross sections for the production of a Z boson in association with jets 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.
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- XXVII. **Reconstruction of decays to merged photons using end-to-end deep learning with domain continuation in the CMS detector**
Tumasyan A., Adam W., Andrejkovic J., Bergauer T., Chatterjee S., Damanakis K., Dragicevic M., Del Valle A. E., Frühwirth R., Jeitler M., et al.
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- XXVIII. **Observation of the Rare Decay of the η Meson to Four Muons**
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- XXIX. **Proton reconstruction with the CMS-TOTEM Precision Proton Spectrometer**
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- XXX. **Azimuthal Correlations within Exclusive Dijets with Large Momentum Transfer in Photon-Lead Collisions.**
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- XXXI. **Geant4 Study for Geometry of Quartz Fiber Luminometer at CMS HL-LHC**
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- XXXII. **Azimuthal correlations in Z +jets events in proton–proton collisions at $\sqrt{s}=13\text{TeV}$**
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- XXXIII. **Constraints on anomalous Higgs boson couplings to vector bosons and fermions from the production of Higgs bosons using the tt final state**
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- XXXIV. **Measurements of inclusive and differential cross sections for the Higgs boson production and decay to four-leptons in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$**
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- XXXV. **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.
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- XXXVI. **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)
- XXXVII. **Precision measurement of the Z boson invisible width in pp collisions root s=13 TeV**
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- XXXVIII. **Search for electroweak production of charginos and neutralinos at root s=13 Tev in final states containing hadronic decays of WW, WZ, or WH and missing transverse momentum**

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- XXXIX. **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 TeV**
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- XL. **Combination of inclusive top-quark pair production cross-section measurements using ATLAS and CMS data at $\sqrt{s}=7$ and 8 TeV**
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- XLI. **Search for CP violating top quark couplings in pp collisions at $\sqrt{s} = 13$ 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.
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- XLII. **Measurement of the mass dependence of the transverse momentum of lepton pairs in Drell-Yan production in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- XLIII. **CMS pythia 8 colour reconnection tunes based on underlying-event data**
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- XLIV. **Search for narrow resonances in the b-tagged dijet mass spectrum in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- XLV. **Search for direct pair production of supersymmetric partners of τ leptons in the final state with two hadronically decaying τ leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- XLVI. **Measurements of Higgs boson production in the decay channel with a pair of τ leptons 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.
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- XLVII. **Observation of electroweak $W+W^-$ pair production in association with two jets in proton-proton collisions at root s=13 TeV**
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- XLVIII. **Search for CP violation using (Formula presented.) events in the lepton+jets channel in pp collisions at $\sqrt{s} = 13$ TeV**
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- XLIX. **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**
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- L. **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.
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- LI. **Observation of triple J/psi meson production in proton-proton collisions**
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- LII. **Search for new particles in an extended Higgs sector with four b quarks in the final state at $s=13\text{TeV}$**
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- LIII. **Nuclear modification of Y states in pPb collisions at $s_{NN}=5.02\text{TeV}$**
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- LIV. **Measurements of the associated production of a W boson and a charm quark in proton-proton collisions at $\sqrt{s}=8\text{TeV}$**
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- LV. **Evidence for WW/WZ vector boson scattering in the decay channel $\langle i \rangle l \langle /i \rangle vqq$ produced in association with two jets in proton-proton collisions at $\sqrt{\langle i \rangle s \langle /i \rangle}=13\text{TeV}$**
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- LVI. **Measurement of the Higgs boson width and evidence of its off-shell contributions to ZZ production**
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- LVII. **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**
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- LVIII. **Search for high-mass resonances decaying to a jet and a Lorentz-boosted resonance in proton-proton collisions at $\text{root } s=13$ TeV**
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- LIX. **Search for Higgs Boson Pair Production in the Four b Quark Final State in Proton-Proton Collisions at $s = 13$ TeV**
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- LX. **Measurement of the Drell-Yan forward-backward asymmetry at high dilepton masses in proton-proton collisions at root $s=13$ TeV**
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- LXI. **First Search for Exclusive Diphoton Production at High Mass with Tagged Protons in Proton-Proton Collisions at $s = 13$ TeV**
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- LXII. **Search for new physics in the lepton plus missing transverse momentum final state in proton-proton collisions at root $s=13$ TeV**
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- LXIII. **Search for heavy resonances decaying to $Z(\nu\nu^*)V(qq^*)$ in proton-proton collisions at $s = 13$ 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.
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- LXIV. **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.
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- LXV. **Search for resonances decaying to three W bosons in the hadronic final state in proton-proton collisions at root $s=13$ TeV**
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- LXVI. **Measurement of the inclusive and differential WZ production cross sections, polarization angles, and triple gauge couplings in pp collisions at $\sqrt{s} = 13$ TeV**
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- LXVII. **Search for long-lived heavy neutral leptons with displaced vertices in proton-proton collisions at $\sqrt{s} = 13$ TeV**
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- LXVIII. **Search for Resonances Decaying to Three W Bosons in Proton-Proton Collisions at root $s=13$ TeV**
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- LXIX. **Probing Charm Quark Dynamics via Multiparticle Correlations in Pb-Pb Collisions at root $s(NN)=5.02$ TeV**
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- LXX. **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 root $s=13$ TeV**
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- LXXI. **Observation of B_s^0 mesons and measurement of the B_s^0/B^+ yield ratio in PbPb collisions at [Formula presented] TeV**
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- LXXX. **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**
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- LXXXI. **Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-**

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

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LXXXII. Observation of $B^0 \rightarrow \psi(2S)K^0S\pi^+\pi^-$ and $B^0S \rightarrow \psi(2S)K^0S$ 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.

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LXXXIII. 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

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LXXXIV. 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.

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LXXXV. 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

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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LXXXVI. Precision measurement of the W boson decay branching fractions in proton-proton collisions at root s=13 TeV

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LXXXVII. Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating nonresonant ZZ or ZH production at root s=13 TeV

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LXXXVIII. Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13$ TeV

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LXXXIX. 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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XC. 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

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XCI. Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at root s=13 TeV

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- XCII. **Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
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- XCv. **Search for $W\gamma$ resonances in proton-proton collisions at $s=13\text{ TeV}$ using hadronic decays of Lorentz-boosted W bosons**
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- XCVI. **Search for long-lived particles produced in association with a Z boson in proton-proton collisions at root $s=13\text{ TeV}$**
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- XCvIII. **Measurement of $W\text{-}/\text{-}\gamma$ differential cross sections in proton-proton collisions at root $s=13\text{ TeV}$ and effective field theory constraints**
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- XCIX. **Study of dijet events with large rapidity separation in proton-proton collisions at $\sqrt{s} = 2.76\text{ TeV}$**
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- C. **Search for strongly interacting massive particles generating trackless jets in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
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- CI. **Fragmentation of jets containing a prompt J/ψ meson in PbPb and pp collisions at $s\text{ NN}=5.02\text{TeV}$**
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- CII. **Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at root $s=13\text{ TeV}$**

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CIII. **Search for long-lived particles decaying to leptons with large impact parameter 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.

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

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

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CVI. **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 root $s=13\text{ TeV}$**

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CVII. **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 root $s=13\text{ TeV}$**

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CVIII. **Evidence for X(3872) in Pb-Pb Collisions and Studies of its Prompt Production at root $s(\text{NN})=5.02\text{ TeV}$**

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

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

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

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

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

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- CXV. **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**
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- CXVII. **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 root s=13 TeV**
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- CXIX. **Measurements of the Electroweak Diboson Production Cross Sections in Proton-Proton Collisions at root s=5.02 TeV Using Leptonic Decays**
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- CXXII. **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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- CXXIII. **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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CXXIV. Study of Z boson plus jets events using variables sensitive to double-parton scattering in pp collisions at 13 TeV

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CXXV. Measurements of the pp \rightarrow W $^{+/-}$ γ γ and pp \rightarrow Z γ γ cross sections at root s=13 TeV and limits 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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CXXVI. Measurement of the electroweak production of Z γ and two jets in proton-proton collisions at root s=13 TeV and constraints on anomalous quartic gauge couplings

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

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

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CXXIX. 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.

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

CXXX. 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., Frühwirth R., Jeitler M., et al.

PHYSICS LETTERS B, vol.820, 2021 (SCI-Expanded)

CXXXI. 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)

CXXXII. 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.

European Physical Journal C, vol.81, no.9, 2021 (SCI-Expanded)

CXXXIII. 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)
- CXXXIV. **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**
Sirunyan A., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., Lechner L., et al.
PHYSICS LETTERS B, vol.820, 2021 (SCI-Expanded)
- CXXXV. **Measurement of the azimuthal anisotropy of Y(1S) and Y(2S) mesons in PbPb collisions at root s(NN)=5.02 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.
PHYSICS LETTERS B, vol.819, 2021 (SCI-Expanded)
- CXXXVI. **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., Fruhwirth R., Jeitler M., et al.
PHYSICAL REVIEW D, vol.104, no.3, 2021 (SCI-Expanded)
- CXXXVII. **Search for a heavy vector resonance decaying to a Z boson and a Higgs boson in proton-proton collisions at $\sqrt{s}=13$ Te**
Sirunyan A. M., Tumasyan A., Adam W., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., Krammer N., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.81, no.8, 2021 (SCI-Expanded)
- CXXXVIII. **Hard color-singlet exchange in dijet events in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., et al.
PHYSICAL REVIEW D, vol.104, no.3, 2021 (SCI-Expanded)
- CXXXIX. **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**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Fruhwirth R., Jeitler M., et al.
PHYSICAL REVIEW LETTERS, vol.127, no.10, 2021 (SCI-Expanded)
- CXL. **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.
PHYSICS LETTERS B, vol.819, 2021 (SCI-Expanded)
- CXLI. **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**
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.
PHYSICAL REVIEW D, vol.104, no.3, 2021 (SCI-Expanded)
- CXLII. **Search for the rare decay of the W boson into a pion and a photon 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.819, 2021 (SCI-Expanded)
- CXLIII. **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., Fruhwirth R., Jeitler M., et al.

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

- CXLIV. **Search for resonant and nonresonant new phenomena in high-mass dilepton final states 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., Fruhwirth R., Jeitler M., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.7, 2021 (SCI-Expanded)

- CXLV. **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., Eroe J., Del Valle A. E., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.7, 2021 (SCI-Expanded)

- CXLVI. **MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s}=13$ TeV**

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

European Physical Journal C, vol.81, no.7, 2021 (SCI-Expanded)

- CXLVII. **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., Eroe J., Del Valle A. E., Frühwirth R., Jeitler M., et al.

PHYSICAL REVIEW D, vol.104, no.1, 2021 (SCI-Expanded)

- CXLVIII. **Performance of the CMS muon trigger system 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.

Journal of Instrumentation, vol.16, no.7, 2021 (SCI-Expanded)

- CXLIX. **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.

PHYSICAL REVIEW LETTERS, vol.126, no.25, 2021 (SCI-Expanded)

- CL. **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.

PHYSICAL REVIEW LETTERS, vol.126, no.25, 2021 (SCI-Expanded)

- CLI. **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)

- CLII. **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)

- CLIII. **In-medium modification of dijets in PbPb collisions at root $s(NN)=5.02$ TeV**

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

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

- CLIV. **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.

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

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

- 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.2021, no.5, 2021 (SCI-Expanded)
- CLVI. **Measurement of the Z boson differential production cross section using its invisible decay mode ($Z \rightarrow \nu(\nu)\overline{\nu}$) 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.
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.5, 2021 (SCI-Expanded)
- CLVII. **Measurement of b jet shapes in proton-proton collisions at $\sqrt{s}=5.02$ 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.2021, no.5, 2021 (SCI-Expanded)
- CLVIII. **Study of Drell-Yan dimuon production in proton-lead 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.
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.5, 2021 (SCI-Expanded)
- CLIX. **Measurement of the CP-violating phase $\phi(s)$ in the $B\text{-}s(0) \rightarrow J/\psi \phi(1020) \rightarrow \mu^{(+)}\mu^{-}K^{+}K^{-}$ channel in proton-proton collisions at $\sqrt{s}=13$ 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.816, 2021 (SCI-Expanded)
- CLX. **Measurement of prompt D-0 and \overline{D}^0 meson azimuthal anisotropy and search for strong electric fields in PbPb collisions at $\sqrt{S\text{-}NN}=5.02$ 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.
 PHYSICS LETTERS B, vol.816, 2021 (SCI-Expanded)
- CLXI. **Search for supersymmetry in final states with two oppositely charged same-flavor leptons and missing transverse momentum 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.
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.4, 2021 (SCI-Expanded)
- CLXII. **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., Erö J., Valle A. E. D., Frühwirth R., Jeitler M., Krammer N., et al.
 European Physical Journal C, vol.81, no.4, 2021 (SCI-Expanded)
- CLXIII. **Angular analysis of the decay $B^{\pm} \rightarrow K^{*}(892)^{\pm} \mu^{+} \mu^{-}$ 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.
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.4, 2021 (SCI-Expanded)
- CLXIV. **Development and validation of HERWIG 7 tunes from CMS underlying-event measurements**
 Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Dragicevic M., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., et al.
 EUROPEAN PHYSICAL JOURNAL C, vol.81, no.4, 2021 (SCI-Expanded)
- CLXV. **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., Erö J., Escalante Del Valle A., Frühwirth R., Jeitler M., Krammer N., et al.
 JOURNAL OF HIGH ENERGY PHYSICS, vol.2021, no.4, 2021 (SCI-Expanded)
- CLXVI. **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.

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

CLXVII. 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., Ambrogi 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)

CLXVIII. 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)

CLXIX. 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., Ambrogi 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)

CLXX. 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)

CLXXI. 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., Ambrogi F., Bergauer T., Dragicevic M., Ero J., Del Valle A. E., Flechl M., Fruhwirth R., et al.

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

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

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

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

CLXXIII. The very forward CASTOR calorimeter of the CMS experiment

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

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

CLXXIV. Correlations of azimuthal anisotropy Fourier harmonics with subevent cumulants in pPb collisions at root s(NN)=8.16 TeV

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

PHYSICAL REVIEW C, vol.103, no.1, 2021 (SCI-Expanded)

CLXXV. 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)

CLXXVI. Evidence for electroweak production of four charged leptons and 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.812, 2021 (SCI-Expanded)
- CLXXVII. **Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
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)
- CLXXVIII. **Search for the lepton flavor violating decay $\tau \rightarrow 3 \mu$ in proton-proton collisions at root $s=13\text{TeV}$**
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.2021, no.1, 2021 (SCI-Expanded)
- CLXXIX. **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)
- CLXXX. **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., Ambrogi 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)
- CLXXXI. **Observation of electroweak production of W gamma with two jets in proton-proton collisions at root $s=13\text{TeV}$**
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.811, 2020 (SCI-Expanded)
- CLXXXII. **Inclusive search for highly boosted Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at root $s=13\text{TeV}$**
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.12, 2020 (SCI-Expanded)
- CLXXXIII. **Dependence of inclusive jet production on the anti-k(T) distance parameter in pp collisions at root $s=13\text{TeV}$**
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, vol.2020, no.12, 2020 (SCI-Expanded)
- CLXXXIV. **Search for bottom-type, vectorlike quark pair production in a fully hadronic final state in proton-proton collisions at root $s=13\text{TeV}$**
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)
- CLXXXV. **Measurement of single-diffractive dijet production in proton-proton collisions at $\sqrt{s}=8\text{TeV}$ with the CMS and TOTEM experiments**
Sirunyan A., Tumasyan A., Adam W., Ambrogi 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)
- CLXXXVI. **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.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.11, 2020 (SCI-Expanded)
- CLXXXVII. **Measurement of $B\text{-}c(2S)(+)$ and $B\text{-}c^*(2S)(+)$ 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.

PHYSICAL REVIEW D, vol.102, no.9, 2020 (SCI-Expanded)

.LXXXVIII. 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)

CLXXXIX. 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)

CXC. 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.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.11, 2020 (SCI-Expanded)

CXCI. Measurement of the top quark Yukawa coupling from t(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)

CXCII. 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)

CXCIII. 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)

CXCIV. 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)

CXCV. 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., Fruhwirth R., et al.

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

CXCVI. 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.

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

CXCVII. 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.

JOURNAL OF INSTRUMENTATION, vol.15, no.10, 2020 (SCI-Expanded)

CXCVIII. 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.
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- CXCIX. **Pileup mitigation at CMS in 13 TeV data**
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- CC. **Search for supersymmetry in proton-proton collisions at $\sqrt{s}=13$ TeV in events with high-momentum Z bosons and missing transverse momentum**
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- CCI. **Measurement of CKM matrix elements in single top quark t-channel production in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CCII. **Studies of Charm Quark Diffusion inside Jets Using Pb-Pb and pp Collisions at $\sqrt{s(NN)}=5.02$ TeV**
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- CCIII. **Measurement of the $Y(1S)$ pair production cross section and search for resonances decaying to $Y(1S)\mu^{+}\mu^{-}$ in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CCIV. **Search for resonant pair production of Higgs bosons in the $bbZZ$ channel in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CCV. **Combination of the W boson polarization measurements in top quark decays using ATLAS and CMS data at $\sqrt{s}=8$ TeV**
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- CCVI. **Measurements of $(t\bar{t})\overline{\text{H}}$ Production and the CP Structure of the Yukawa Interaction between the Higgs Boson and Top Quark in the Diphoton Decay Channel**
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- CCVII. **Measurement of the associated production of a Z boson with charm or bottom quark jets in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CCVIII. **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**
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- CCIX. **Study of central exclusive $\pi^+\pi^-$ production in proton-proton collisions at $\sqrt{s}=5.02$ and 13 TeV**
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- CCXI. **Search for charged Higgs bosons decaying into a top and a bottom quark in the all-jet final state of pp collisions at $\sqrt{s}=13$ TeV**
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- CCXIII. **Measurement of $t\bar{t}$ normalised multi-differential cross sections in pp collisions at $\sqrt{s}=13$ TeV, and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions**
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- CCXIV. **Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV**
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- CCXV. **Measurement of the cross section for $t\bar{t}$ production with additional jets and b jets in pp collisions at $\sqrt{s}=13$ TeV**
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- CCXVI. **Search for disappearing tracks in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CCXVII. **A measurement of the Higgs boson mass in the diphoton decay channel**
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- CCXVIII. **Measurement of the top quark forward-backward production asymmetry and the anomalous chromoelectric and chromomagnetic moments in pp collisions at $\sqrt{s}=13$ TeV**
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- CCXIX. **Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in PbPb collisions at $\sqrt{s(NN)}=2.76$ and 5.02 TeV**
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- CCXX. **Search for dijet resonances using events with three jets in proton-proton collisions at root s=13 TeV**
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- CCXXI. **Measurements with silicon photomultipliers of dose-rate effects in the radiation damage of plastic scintillator tiles in the CMS hadron endcap calorimeter**
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- CCXXII. **Identification of heavy, energetic, hadronically decaying particles using machine-learning techniques**
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- CCXXIII. **Measurement of the cross section for electroweak production of a Z boson, a photon and two jets in proton-proton collisions at root s=13 TeV and constraints on anomalous quartic couplings**
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- CCXXIV. **Strange hadron production in pp and pPb collisions at root(NN)-N-s=5.02 TeV**
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- CCXXV. **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**
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- CCXXVI. **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:mospace width="0.166667em"mml:mospaceTe mml:mospace width="0.333333em"mml:mospace**
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- CCXXVII. **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**
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- CCXXVIII. **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**
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- CCXXIX. **Calibration of the CMS hadron calorimeters using proton-proton collision data at root s=13 TeV**
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- CCXXX. **Study of J/psi meson production inside jets in pp collisions at N root s=8 TeV The CM Collaboration**

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- CCXXXI. **Search for high mass dijet resonances with a new background prediction method in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CCXXXII. **Search for direct top squark pair production in events with one lepton, jets, and missing transverse momentum at 13 TeV with the CMS experiment**
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- CCXXXIII. **Measurement of the $t(\bar{t})b(\bar{b})$ production cross section in the all-jet final state in pp collisions at $\sqrt{s}=13$ TeV**
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- CCXXXIV. **Measurement of properties of $B(s)0 \rightarrow \mu^{+}\mu^{-}$ decays and search for $B-0 \rightarrow \mu^{+}\mu^{-}$ with the CMS experiment**
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- CCXXXV. **Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CCXXXVI. **Running of the top quark mass from proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CCXXXVII. **Production of $\Lambda^{+}(c)$ baryons in proton-proton and lead-lead collisions at $\sqrt{s_{NN}}=5.02$ TeV**
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- CCXXXVIII. **Constraints on the $\chi(c1)$ versus $\chi(c2)$ Polarizations in Proton-Proton Collisions at $\sqrt{s}=8$ TeV**
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- CCXXXIX. **Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV**
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- CCXL. **Study of excited $\Lambda(0)(b)$ states decaying to $\Lambda(0)(b)\pi^{+}\pi^{-}$ in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CCXLI. **Experimental study of different silicon sensor options for the upgrade of the CMS Outer Tracker**
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- CCXLII. **A multi-dimensional search for new heavy resonances decaying to boosted WW, WZ, or ZZ boson pairs in the dijet final state at 13TeV**
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- CCXLIII. **Search for direct pair production of supersymmetric partners to the tau lepton in proton-proton collisions at root s=13TeV**
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- CCXLIV. **Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at root s=13TeV**
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- CCXLV. **A search for the standard model Higgs boson decaying to charm quarks**
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- CCXLVI. **Search for physics beyond the standard model in multilepton final states in proton-proton collisions at root s=13 TeV**
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- CCXLVII. **Measurement of top quark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CCXLVIII. **Bose-Einstein correlations of charged hadrons in proton-proton collisions at $\sqrt{s}=13$ TeV**
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- CCXLIX. **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**
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- CCL. **Search for new neutral Higgs bosons through the $H \rightarrow ZA \rightarrow l^+ l^- \bar{b} b$ process in pp collisions at $\sqrt{s}=13$ TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
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- CCLI. **Search for a heavy Higgs boson decaying to a pair of W bosons in proton-proton collisions at root s=13 TeV**

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- CCLII. **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., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
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- CCLIII. **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., Ambrogi F., Bergauer T., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., Fruehwirth R., et al.
PHYSICAL REVIEW D, vol.101, no.5, 2020 (SCI-Expanded)
- CCLIV. **Observation of the Lambda(0)(b) -> J/psi Lambda phi decay in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.802, 2020 (SCI-Expanded)
- CCLV. **Measurement of the top quark pair production cross section in dilepton final states containing one tau lepton 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.
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- CCLVI. **Combined search for supersymmetry with photons in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.801, 2020 (SCI-Expanded)
- CCLVII. **Search for top squark pair production in a final state with two tau leptons in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
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- CCLVIII. **Performance of the reconstruction and identification of high-momentum 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.
JOURNAL OF INSTRUMENTATION, vol.15, no.2, 2020 (SCI-Expanded)
- CCLIX. **Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
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- CCLX. **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 s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
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- CCLXI. **Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements**
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- CCLXII. **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., Eroe J., Escalante Del Valle A., Flechl M., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.1, 2020 (SCI-Expanded)
- CCLXIII. **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)
- CCLXIV. **Search for Supersymmetry with a Compressed Mass Spectrum in Events with a Soft tau Lepton, a Highly Energetic Jet, and Large Missing Transverse Momentum in Proton-Proton Collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
PHYSICAL REVIEW LETTERS, vol.124, no.4, 2020 (SCI-Expanded)
- CCLXV. **Search for light pseudoscalar boson pairs produced from decays of the 125 GeV Higgs boson in final states with two muons and two nearby tracks in pp collisions at root s d=13TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.800, 2020 (SCI-Expanded)
- CCLXVI. **Observation of nuclear modifications in W-+/- boson production in pPb collisions at root s(NN)=8.16 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.800, 2020 (SCI-Expanded)
- CCLXVII. **Search for a charged Higgs boson decaying into top and bottom quarks in events with electrons or muons in proton-proton collisions at root s=13TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Escalante Del Valle A., Flechl M., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2020, no.1, 2020 (SCI-Expanded)
- CCLXVIII. **Measurement of the single top quark and antiquark production cross sections in the t channel and their ratio in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.800, 2020 (SCI-Expanded)
- CCLXIX. **Multiparticle correlation studies in pPb collisions root s(NN)=8.16 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICAL REVIEW C, vol.101, no.1, 2020 (SCI-Expanded)
- CCLXX. **Evidence for WW production from double-parton interactions in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.80, no.1, 2020 (SCI-Expanded)
- CCLXXI. **Study of the $B^+ \rightarrow J/\psi(\Lambda_b)$ 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., Eroe J., Del Valle A. E., Flechl M., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2019 (SCI-Expanded)
- CCLXXII. **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., Eroe J., Del

Valle A. E., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2019 (SCI-Expanded)

- CCLXXIII. **Search for long-lived particles using delayed photons 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 D, vol.100, no.11, 2019 (SCI-Expanded)
- CCLXXIV. **Search for Physics beyond the Standard Model in Events with Overlapping Photons and Jets**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
PHYSICAL REVIEW LETTERS, vol.123, no.24, 2019 (SCI-Expanded)
- CCLXXV. **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., Eroe J., Del Valle A. E., Flechl M., et al.
PHYSICAL REVIEW D, vol.100, no.11, 2019 (SCI-Expanded)
- CCLXXVI. **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., Eroe J., Del Valle A. E., et al.
PHYSICAL REVIEW LETTERS, vol.123, no.23, 2019 (SCI-Expanded)
- CCLXXVII. **Constraints on anomalous HVV couplings from the production of Higgs bosons decaying to tau lepton pairs**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICAL REVIEW D, vol.100, no.11, 2019 (SCI-Expanded)
- :CLXXVIII. **Pseudorapidity distributions of charged hadrons in xenon-xenon collisions at root S-NN=5.44 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.799, 2019 (SCI-Expanded)
- CCLXXIX. **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., Eroe J., Del Valle A. E., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2019 (SCI-Expanded)
- CCLXXX. **Probing the chiral magnetic wave in pPb and PbPb collisions at root S-NN=5.02 TeV using charge-dependent azimuthal anisotropies**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
PHYSICAL REVIEW C, vol.100, no.6, 2019 (SCI-Expanded)
- CCLXXXI. **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., Eroe J., Del Valle A. E., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2019 (SCI-Expanded)
- CCLXXXII. **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., Eroe J., Del Valle A. E., et al.
European Physical Journal C, vol.79, no.11, 2019 (SCI-Expanded)
- :CLXXXIII. **Search for supersymmetry using Higgs boson to diphoton decays at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del

Valle A. E., et al.

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

- :CLXXXIV. **Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
PHYSICS LETTERS B, vol.798, 2019 (SCI-Expanded)
- CCLXXXV. **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., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
PHYSICS LETTERS B, vol.798, 2019 (SCI-Expanded)
- :CLXXXVI. **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., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2019 (SCI-Expanded)
- CLXXXVII. **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., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
European Physical Journal C, vol.79, no.11, 2019 (SCI-Expanded)
- :LXXXVIII. **Search for anomalous electroweak production of vector boson pairs in association with two jets 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., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.798, 2019 (SCI-Expanded)
- :CLXXXIX. **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., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
European Physical Journal C, vol.79, no.11, 2019 (SCI-Expanded)
- CCXC. **Search for pair production of vectorlike quarks in the fully hadronic final state**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., Flechl M., et al.
PHYSICAL REVIEW D, vol.100, no.7, 2019 (SCI-Expanded)
- CCXCI. **Measurement of the top quark Yukawa coupling from $t(\bar{t})$ kinematic distributions in the lepton plus jets final state 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., Eroe J., Del Valle A. E., et al.
PHYSICAL REVIEW D, vol.100, no.7, 2019 (SCI-Expanded)
- CCXCII. **Search for supersymmetry in proton-proton collisions at $\sqrt{s}=13\text{TeV}$ in final states with jets and missing transverse momentum**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.10, 2019 (SCI-Expanded)
- CCXCIII. **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., Ambrogio 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)
- CCXCIV. **Charged-particle angular correlations in XeXe collisions at $\sqrt{s(NN)}=5.44\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del

- Valle A. E., et al.
 PHYSICAL REVIEW C, vol.100, no.4, 2019 (SCI-Expanded)
- CCXCV. **Search for dark photons in decays of Higgs bosons produced in association with Z bosons 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., Escalante Del Valle A., Flechl M., et al.
 JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2019 (SCI-Expanded)
- CCXCVI. **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)
- CCXCVII. **Measurement of the top quark polarization and $t(t)$ -over-barspin correlations using dilepton final states in proton-proton collisions at root s=13 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
 PHYSICAL REVIEW D, vol.100, no.7, 2019 (SCI-Expanded)
- CCXCVIII. **Search for resonances decaying to a pair of Higgs bosons in the $b(b)$ -over-bar $q(q)$ -over-bar ' l nu 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., Ero J., Escalante Del Valle A., et al.
 JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2019 (SCI-Expanded)
- CCXCIX. **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)
- CCC. **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)
- CCCI. **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)
- CCCII. **Measurement of B-s(0) meson production in pp and PbPb collisions at root S=5.02 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., 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)
- CCCIII. **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)
- CCCIV. **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)
- CCCV. **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., Eroe J., Del Valle A. E., et al.

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

CCCVI. 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 $\sqrt{s}=13$ TeV

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

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

CCCVII. Measurement of electroweak WZ boson production and search for new physics in WZ plus two jets events in pp collisions at $\sqrt{s}=13$ TeV

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)

CCCVIII. 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., Eroe J., Del Valle A. E., et al.

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

CCCIX. Centrality and pseudorapidity dependence of the transverse energy density in pPb collisions at $\sqrt{s_{NN}}=5.02$ TeV

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

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

CCCX. Measurement of exclusive $\rho(770)0$ photoproduction in ultraperipheral pPb 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., Eroe J., Del Valle A. E., et al.

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

CCCXI. Studies of Beauty Suppression via Nonprompt D-0 Mesons in Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02$ TeV

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

PHYSICAL REVIEW LETTERS, vol.123, no.2, 2019 (SCI-Expanded)

CCCXII. Search for the production of (WWW -/+)-W-+/-W-+/- events at $\sqrt{s}=13$ TeV

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

PHYSICAL REVIEW D, vol.100, no.1, 2019 (SCI-Expanded)

CCCXIII. Performance of missing transverse momentum reconstruction in proton-proton collisions at $\sqrt{s}=13$ TeV using the CMS detector

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.14, 2019 (SCI-Expanded)

CCCXIV. Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at $\sqrt{s}=13$ 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.7, 2019 (SCI-Expanded)

CCCXV. Search for charged Higgs bosons in the H-+/- -> tau(+/-)nu(tau) decay 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., Dragicevic M., Eroe J., Del Valle A. E., et al.

- JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2019 (SCI-Expanded)
- CCCXVI. **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)
- CCCXVII. **Search for a standard model-like Higgs boson in the mass range between 70 and 110 GeV in the diphoton final state in proton-proton collisions at root s=8 and 13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.793, pp.320-347, 2019 (SCI-Expanded)
- CCCXVIII. **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., Eroe J., Del Valle A. E., et al.
JOURNAL OF INSTRUMENTATION, vol.14, 2019 (SCI-Expanded)
- CCCXIX. **Search for invisible decays of a Higgs boson produced through vector boson fusion in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
PHYSICS LETTERS B, vol.793, pp.520-551, 2019 (SCI-Expanded)
- CCCXX. **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., Eroe J., Del Valle A. E., et al.
PHYSICAL REVIEW D, vol.99, no.11, 2019 (SCI-Expanded)
- CCCXXI. **Search for the associated production of the Higgs boson and a vector boson in proton-proton collisions at=13 TeV via Higgs boson decays to leptons**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2019, no.6, 2019 (SCI-Expanded)
- CCCXXII. **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)
- CCCXXIII. **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)
- CCCXXIV. **Search for associated production of a Higgs boson and a single top quark in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
PHYSICAL REVIEW D, vol.99, no.9, 2019 (SCI-Expanded)
- CCCXXV. **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)
- CCCXXVI. **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)

CCCXXVII. **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., Eroe J., Del Valle A. E., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.79, no.5, 2019 (SCI-Expanded)

:CCXXVIII. **Search for supersymmetry in events with a photon, jets, b -jets, and missing transverse momentum in proton-proton collisions at 13 Te**

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)

CCCXXIX. **Search for a W ' boson decaying to a tau lepton and a neutrino in proton-proton collisions at root s=13 TeV**

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

PHYSICS LETTERS B, vol.792, pp.107-131, 2019 (SCI-Expanded)

CCCXXX. **Search for an L-mu - L-tau gauge boson using Z -> 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)

CCCXXXI. **Measurement of the t t - production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at sqrt s=13TeV**

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

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

CCCXXXII. **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)

:CCXXXIII. **Search for resonant production of second-generation sleptons with same-sign dimuon events in proton-proton collisions at sqrt s=13TeV**

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

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:CCXXXIV. **Search for contact interactions and large extra dimensions in the dilepton mass spectra from proton-proton collisions at root s=13 TeV**

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CCCXXXV. **Jet Shapes of Isolated Photon-Tagged Jets in Pb-Pb and pp Collisions at root S-NN=5.02 TeV**

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

:CCXXXVI. **Observation of prompt J/psi meson elliptic flow in high-multiplicity pPb collisions at root s(NN)=8.16 TeV**

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

- PHYSICS LETTERS B, vol.791, pp.172-194, 2019 (SCI-Expanded)
- CCXXXVII. **Search for excited leptons in final states in proton-proton collisions at root $s=13$ TeV**
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- :CXXXVIII. **Observation of Single Top Quark Production in Association with a Z Boson in Proton-Proton Collisions at root $s=13$ TeV**
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- :CXXXIX. **Search for W Boson Decays to Three Charged Pions**
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- CCCXL. **Search for nonresonant Higgs boson pair production in the $b(\bar{b})\overline{b}(\bar{b})$ final state at root $s=13$ TeV**
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- CCCXLI. **Search for resonant $t(\bar{t})\overline{t}(\bar{t})$ production in proton-proton collisions at root $s=13$ TeV**
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- CCCXLII. **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., Eroe J., Del Valle A. E., et al.
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- CCCXLIII. **Measurements of properties of the Higgs boson decaying to a W boson pair in pp collisions at root $s=13$ TeV**
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- CCCXLIV. **Measurements of the pp WZ inclusive and differential production cross sections and constraints on charged anomalous triple gauge couplings at $s=13$ TeV**
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- CCCXLV. **Observation of Two Excited B-c(+) States and Measurement of the B-c(+) ($2S$) Mass in pp Collisions at root $s=13$ TeV**
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- CCCXLVI. **Search for pair production of first-generation scalar leptoquarks at root $s=13$ TeV**
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- CCCXLVII. **Search for a W boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state**
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- :CCXLVIII. **Search for dark matter produced in association with a single top quark or a top quark pair in proton-proton collisions at $s=13$ TeV**
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- CCCXLIX. **Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton-proton collisions at $\sqrt{s}=13$ Te**
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- CCCL. **Inclusive search for supersymmetry in pp collisions at root $s=13$ TeV using razor variables and boosted object identification in zero and one lepton final states**
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- CCCLI. **Measurement of nuclear modification factors of $\gamma(1S)$, $\gamma(2S)$, and $\gamma(3S)$ mesons in PbPb collisions at root $s(NN)=5.02$ TeV**
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- CCCLII. **Search for top quark partners with charge $5/3$ in the same-sign dilepton and single-lepton final states in proton-proton collisions at root $s=13$ TeV**
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- CCCLIII. **Measurement of associated production of a W boson and a charm quark in proton-proton collisions at $\sqrt{s}=13$ Te**
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- CCCLIV. **Search for a heavy resonance decaying to a top quark and a vector-like top quark in the lepton plus jets final state in pp collisions at root $s=13$ TeV**
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- CCCLV. **Combination of Searches for Higgs Boson Pair Production in Proton-Proton Collisions at root $s=13$ TeV**
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- CCCLVI. **Search for the pair production of light top squarks in the $e(+/-)\mu(-/+)$ final state in proton-proton collisions at root $s=13$ TeV**
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- CCCLVII. **Search for supersymmetric partners of electrons and muons in proton-proton collisions at root $s=13$ TeV**
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- CCCLVIII. **Search for Narrow H gamma Resonances in Proton-Proton Collisions at root s=13 TeV**
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- CCCLIX. **Measurement of prompt psi(2S) production cross sections in proton-lead and proton-proton collisions at root s(NN)=5.02 TeV**
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- CCCLX. **Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two leptons and two jets in proton-proton collisions at root s=13 TeV**
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- CCCLXI. **Measurement of exclusive Y photoproduction from protons in p Pb collisions at sqrt(sNN)=5.02TeV**
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- CCCLXII. **Search for t(t)over-barH production in the H -> b(b)over-bar decay channel with leptonic t(t)over-bar decays in proton-proton collisions at root s=13 TeV**
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- CCCLXIII. **Search for single production of vector-like quarks decaying to a top quark and a W boson in proton-proton collisions at sqrt(s)=13TeV**
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- CCCLXIV. **Search for rare decays of Z and Higgs bosons to J / psi and a photon in proton-proton collisions at sqrt(s) = 13 TeV**
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- CCCLXV. **Fragmentation of J/psi in jets in pp collisions at root s=5.02 TeV Batoul Diab for the CMS collaboration**
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- CCCLXVI. **Search for long-lived particles decaying into displaced jets in proton-proton collisions at root s=13 TeV**
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- CCCLXVII. **Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$**
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- CCCLXVIII. **Search for the chiral magnetic effect at the LHC with the CMS experiment**
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- CCCLXIX. **D-0-Meson R-AA in PbPb Collisions at $\sqrt{s(NN)}=5.02$ TeV and Elliptic Flow in pPb Collisions at $\sqrt{s(NN)}=8.16$ TeV with CMS**
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- CCCLXX. **Measurement of anisotropic flow in XeXe collisions at 5.44 TeV with the CMS experiment**
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- CCCLXXI. **Search for new particles decaying to a jet and an emerging jet**
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- CCCLXXII. **Study of the underlying event in top quark pair production in p p collisions at 13 Te**
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- CCCLXXIII. **Multiparticle correlations and higher order harmonics in pPb collisions at $\sqrt{s(NN)}=8.16$ TeV**
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- CCCLXXIV. **Measurements of $t(\bar{t})$ over-bar differential cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV using events containing two leptons**
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- CCCLXXV. **Non-Gaussian elliptic-flow fluctuations in PbPb collisions at $\sqrt{s(NN)}=5.02$ TeV**
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- CCCLXXVII. **Beyond nPDFs effects : Prompt J/psi and psi(2S) production in pPb and pp collisions**
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- CCCLXXVIII. **Evidence for light-by-light scattering in ultraperipheral PbPb collisions at $\sqrt{s(NN)}=5.02$ TeV**
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- CCCLXXIX. **Search for pair production of second-generation leptoquarks at $\sqrt{s}=13$ TeV**
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- CCCLXXX. **Measurement of differential cross sections for Z boson pair production in association with jets at $\sqrt{s}=8$ and 13 TeV**
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- CCCLXXXI. **Measurement of differential cross sections for inclusive isolated-photon and photon+jet production in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
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- CCLXXXII. **Search for vector-like quarks in events with two oppositely charged leptons and jets in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$**
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- CLXXXIII. **Search for the Higgs Boson Decaying to Two Muons in Proton-Proton Collisions at root s=13 TeV**
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- CLXXXIV. **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**
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- CCLXXXV. **Search for Higgs boson pair production in the gamma gamma b(b)over-bar final state in pp collisions at root s=13 TeV**
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- CLXXXVI. **Search for heavy resonances decaying into two Higgs bosons or into a Higgs boson and a W or Z boson in proton-proton collisions at 13 TeV**
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- CLXXXVII. **Search for pair-produced three-jet resonances in proton-proton collisions at root s=13 TeV**
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- CLXXXIX. **Search for low-mass resonances decaying into bottom quark-antiquark pairs in proton-proton collisions at root s=13 TeV**
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- CCCXC. **Measurement of inclusive and differential Higgs boson production cross sections in the diphoton decay channel in proton-proton collisions at root s=13 TeV**
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- CCCXCI. **Search for Dark Matter Particles Produced in Association with a Top Quark Pair at root s=13 TeV**
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- CCCXCII. **Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in proton-proton collisions at root s=13 TeV**
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- CCCXCIII. **Observation of Medium-Induced Modifications of Jet Fragmentation in Pb-Pb Collisions at root s(NN)=5.02 TeV Using Isolated Photon-Tagged Jets**
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- CCCXCIV. **Search for Leptoquarks Coupled to Third-Generation Quarks in Proton-Proton Collisions at root s=13 TeV**
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- CCCXCV. **Angular analysis of the decay $B^+ \rightarrow K^+ \mu^+ \mu^-$ in proton-proton collisions at root s=8 TeV**
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- CCCXCVI. **Event shape variables measured using multijet final states in proton-proton collisions at root s=13 TeV**
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- CCCXCVII. **Search for pair-produced resonances decaying to quark pairs in proton-proton collisions at root s=13 TeV**
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- :CCXCVIII. **Measurement of the top quark mass with lepton+jets final states using p p collisions at $\sqrt{s}=13\text{TeV}$**
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- CCCXCIX. **Measurements of the differential jet cross section as a function of the jet mass in dijet events from proton-proton collisions at=13 TeV**
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- CD. **Search for supersymmetry in events with a tau lepton pair and missing transverse momentum in proton-proton collisions at root s=13TeV**
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- CDI. **Search for long-lived particles with displaced vertices in multijet events in proton-proton collisions at root s=13 TeV**
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PHYSICAL REVIEW D, vol.98, no.9, 2018 (SCI-Expanded)
- CDII. **Search for the decay of a Higgs boson in the $\ell\bar{\ell}\gamma$ 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., Brondolin E., Dragicevic M., Eroe J., et al.

Journal of High Energy Physics, vol.2018, no.11, 2018 (SCI-Expanded)

CDIII. Searches for pair production of charginos and top squarks in final states with two oppositely charged leptons in proton-proton collisions at root $s=13$ TeV

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

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CDIV. Search for physics beyond the standard model in high-mass diphoton events from proton-proton collisions at root $s=13$ TeV

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

PHYSICAL REVIEW D, vol.98, no.9, 2018 (SCI-Expanded)

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

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

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CDVI. Measurement of differential cross sections for Z boson production in association with jets in proton-proton collisions at $\sqrt{s}=13$ TeV

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

European Physical Journal C, vol.78, no.11, 2018 (SCI-Expanded)

CDVII. Search for a charged Higgs boson decaying to charm and bottom quarks 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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CDVIII. Evidence for the Associated Production of a Single Top Quark and a Photon 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 LETTERS, vol.121, no.22, 2018 (SCI-Expanded)

CDIX. 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.

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CDX. Search for black holes and spherons 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.

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

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CDXII. Measurement of jet substructure observables in $t(\bar{t})$ events from proton-proton collisions at root $s=13$ TeV

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

- M., Eroe J., et al.
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- CDXIII. **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 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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- CDXIV. **Studies of $B_s^{*2}(5840)0$ and $B_s(5830)0$ mesons including the observation of the $B_s^{*2}(5840)0 \rightarrow B0K_S0$ decay in proton-proton collisions at $\sqrt{s}=8\text{TeV}$**
 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.
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- CDXV. **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.
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- CDXVI. **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)
- CDXVII. **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)
- CDXVIII. **Observation of the $Z \rightarrow \psi l^{+}l^{-}$ 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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- CDXIX. **Study of jet quenching with isolated-photon plus jet correlations 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., Brondolin E., Dragicevic M., Eroe J., et al.
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- CDXX. **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)
- CDXXI. **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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- CDXXII. **Performance of reconstruction and identification of tau leptons decaying to hadrons and nu(tau) 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.
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- CDXXIII. **Pseudorapidity and transverse momentum dependence of flow harmonics in pPb and PbPb collisions**

- 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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- CDXXIV. **Measurement of the groomed jet mass in PbPb 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., Eroe J., Del Valle A. E., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2018 (SCI-Expanded)
- CDXXV. **Search for third-generation scalar leptoquarks decaying to a top quark and a τ lepton 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.78, no.9, 2018 (SCI-Expanded)
- CDXXVI. **Search for a heavy resonance decaying into a Z boson and a Z or W boson in $2l2q$ final states at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- CDXXVII. **Search for top squarks decaying via four-body or chargino-mediated modes in single-lepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- CDXXVIII. **Search for additional neutral MSSM Higgs bosons in the tau tau final state in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- CDXXIX. **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.
PHYSICAL REVIEW LETTERS, vol.121, no.12, 2018 (SCI-Expanded)
- CDXXX. **Search for Z gamma resonances using leptonic and hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.9, 2018 (SCI-Expanded)
- CDXXXI. **Measurement of the $Z / \gamma^* \rightarrow \tau\tau$ cross section in pp collisions at $\sqrt{s}=13$ TeV and validation of τ lepton analysis techniques**
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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- CDXXXII. **Measurement of the weak mixing angle using the forward-backward asymmetry of Drell-Yan events in pp 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.
European Physical Journal C, vol.78, no.9, 2018 (SCI-Expanded)
- CDXXXIII. **Search for dark matter produced in association with a Higgs boson decaying to gamma gamma or $\tau(+)\tau(-)$ at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Dragicevic M., Eroe J., Del Valle A. E., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.9, 2018 (SCI-Expanded)
- CDXXXIV. **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.

European Physical Journal C, vol.78, no.9, 2018 (SCI-Expanded)

CDXXXV. **Search for new physics in dijet angular distributions using proton-proton collisions at $\sqrt{s}=13\text{TeV}$ and constraints on dark matter and other models**

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.78, no.9, 2018 (SCI-Expanded)

CDXXXVI. **Search for disappearing tracks as a signature of new long-lived particles in proton-proton collisions at root $s=13\text{ TeV}$**

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

JOURNAL OF HIGH ENERGY PHYSICS, no.8, 2018 (SCI-Expanded)

CDXXXVII. **Search for resonant pair production of Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at 13 TeV**

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

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.8, 2018 (SCI-Expanded)

DXXXVIII. **Constraining Gluon Distributions in Nuclei Using Dijets in Proton-Proton and Proton-Lead Collisions at root $s(NN)=5.02\text{ TeV}$**

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

PHYSICAL REVIEW LETTERS, vol.121, no.6, 2018 (SCI-Expanded)

CDXXXIX. **Search for narrow and broad dijet resonances in proton-proton collisions at root $s=13\text{ TeV}$ and constraints on dark matter mediators and other new particles**

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

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.8, 2018 (SCI-Expanded)

CDXL. **Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying tau leptons at root $s=13\text{ TeV}$**

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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CDXLI. **Observation of the $\chi(b1)(3P)$ and $\chi(b2)(3P)$ and Measurement of their Masses**

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

PHYSICAL REVIEW LETTERS, vol.121, no.9, 2018 (SCI-Expanded)

CDXLII. **Constraints on models of scalar and vector leptoquarks decaying to a quark and a neutrino at root $s=13\text{ TeV}$**

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

PHYSICAL REVIEW D, vol.98, no.3, 2018 (SCI-Expanded)

CDXLIII. **Measurement of the cross section for top quark pair production in association with a W or Z boson in proton-proton collisions at root $s=13\text{ TeV}$**

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

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CDXLIV. **Search for vector-like T and B quark pairs in final states with leptons at root $s=13\text{ TeV}$**

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

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- CDXLV. **Search for R-parity violating supersymmetry in pp collisions at $\sqrt{s}=13$ TeV using bjets in a final state with a single lepton, many jets, and high sum of large-radius jet masses**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICS LETTERS B, vol.783, pp.114-139, 2018 (SCI-Expanded)
- CDXLVI. **Search for beyond the standard model Higgs bosons decaying into a $b(\bar{b})$ pair in pp collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
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- CDXLVII. **Elliptic Flow of Charm and Strange Hadrons in High-Multiplicity p plus Pb Collisions at $\sqrt{s_{NN}}=8.16$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICAL REVIEW LETTERS, vol.121, no.8, 2018 (SCI-Expanded)
- CDXLVIII. **Search for new physics in events with two soft oppositely charged leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICS LETTERS B, vol.782, pp.440-467, 2018 (SCI-Expanded)
- CDXLIX. **Search for a heavy resonance decaying into a Z boson and a vector boson in the $v(\bar{v})q(\bar{q})$ final state**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.7, 2018 (SCI-Expanded)
- CDL. **Measurement of the underlying event activity in inclusive Z boson production in proton-proton collisions at $\sqrt{s}=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
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- CDLI. **Nuclear modification factor of D-0 mesons in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICS LETTERS B, vol.782, pp.474-496, 2018 (SCI-Expanded)
- CDLII. **Search for a singly produced third-generation scalar leptoquark decaying to a tau lepton and a bottom quark 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., Eroo J., Del Valle A. E., et al.
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- CDLIII. **Observation of proton-tagged, central (semi)exclusive production of high-mass lepton pairs in pp collisions at 13 TeV with the CMS-TOTEM precision proton spectrometer**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
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- CDLIV. **Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV**
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- CDLV. **Electroweak production of two jets in association with a Z boson in proton-proton collisions $\sqrt{s}=13$ TeV**

- Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
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- CDLVI. **Azimuthal correlations for inclusive 2-jet, 3-jet, and 4-jet events in pp collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
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- CDLVII. **Search for high-mass resonances in final states with a lepton and missing transverse momentum at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
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- CDLVIII. **Measurement of angular parameters from the decay $B^0 \rightarrow K^{*0} \mu^{+} \mu^{-}$ 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., Eroo J., et al.
PHYSICS LETTERS B, vol.781, pp.517-541, 2018 (SCI-Expanded)
- CDLIX. **Search for a massive resonance decaying to a pair of Higgs bosons in the four b quark final state in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICS LETTERS B, vol.781, pp.244-269, 2018 (SCI-Expanded)
- CDLX. **Search for high-mass resonances in dilepton final states in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
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- CDLXI. **Bose-Einstein correlations in pp, pPb, and PbPb collisions at root s(NN)=0.9-7 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICAL REVIEW C, vol.97, no.6, 2018 (SCI-Expanded)
- CDLXII. **Search for excited quarks of light and heavy flavor in gamma plus jet final states in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICS LETTERS B, vol.781, pp.390-411, 2018 (SCI-Expanded)
- CDLXIII. **Search for Physics Beyond the Standard Model in Events with High-Momentum Higgs Bosons and Missing Transverse Momentum in Proton-Proton Collisions at 13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICAL REVIEW LETTERS, vol.120, no.24, 2018 (SCI-Expanded)
- CDLXIV. **Search for dark matter in events with energetic, hadronically decaying top quarks and missing transverse momentum at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, 2018 (SCI-Expanded)
- CDLXV. **Measurement of differential cross sections for the production of top quark pairs and of additional jets in lepton plus jets events from pp collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICAL REVIEW D, vol.97, no.11, 2018 (SCI-Expanded)

- CDLXVI. **Measurement of b hadron lifetimes in pp collisions at $\sqrt{s}=8\text{TeV}$**
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.78, no.6, 2018 (SCI-Expanded)
- CDLXVII. **Measurements of differential cross sections of top quark pair production as a function of kinematic event variables in proton-proton collisions at root $s=13\text{ TeV}$**
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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- CDLXVIII. **Search for a new scalar resonance decaying to a pair of Z bosons in proton-proton collisions at root $s=13\text{ TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- CDLXIX. **Observation of (tt)over-barH Production**
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- CDLXX. **Performance of the CMS muon detector and muon reconstruction with proton-proton collisions at root $s=13\text{ TeV}$**
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- CDLXXI. **Search for single production of vector-like quarks decaying to a b quark and a Higgs boson**
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- CDLXXII. **Measurement of prompt and nonprompt charmonium suppression in PbPb collisions at 5.02 TeV**
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- CDLXXIII. **Search for lepton flavour violating decays of the Higgs boson to mu tau and e tau in proton-proton collisions at root $s=13\text{ TeV}$**
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- CDLXXIV. **Search for single production of a vector- like T quark decaying to a Z boson and a top quark in proton-proton collisions at root $s=13\text{ TeV}$**
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- CDLXXV. **Search for Heavy Neutral Leptons in Events with Three Charged Leptons in Proton-Proton Collisions at root $s=13\text{ TeV}$**
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- CDLXXVI. **Identification of heavy-flavour jets with the CMS detector in pp collisions at 13 TeV**
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- CDLXXVII. **Search for gauge-mediated supersymmetry in events with at least one photon and missing**

transverse momentum in pp collisions at $\sqrt{s}=13$ TeV

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DLXXVIII. Search for Narrow Resonances in the b-Tagged Dijet Mass Spectrum in Proton-Proton Collisions at $\sqrt{s}=8$ TeV

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CDLXXIX. Search for a heavy right-handed W boson and a heavy neutrino in events with two same-flavor leptons and two jets \sqrt{s} at $\sqrt{s}=13$ TeV

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CDLXXX. Jet properties in PbPb and pp collisions at $\sqrt{s_{NN}}=5.02$ TeV

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CDLXXXI. Search for new long-lived particles at $\sqrt{s}=13$ TeV

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CDLXXXII. Search for a heavy resonance decaying to a pair of vector bosons in the lepton plus merged jet final state $\sqrt{s}=13$ TeV

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DLXXXIII. Evidence for the Higgs boson decay to a bottom quark-antiquark pair

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DLXXXIV. Search for supersymmetry in events with one lepton and multiple jets exploiting the angular correlation between the lepton and the missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV

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CDLXXXV. Measurement of Prompt D-0 Meson Azimuthal Anisotropy in Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02$ TeV

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DLXXXVI. Search for natural and split supersymmetry in proton-proton collisions at $\sqrt{s}=13$ TeV in final states with jets and missing transverse momentum

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DLXXXVII. Search for decays of stopped exotic long-lived particles produced 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., Eroee J., et al.

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- DLXXXVIII. **Search for new physics in final states with an energetic jet or a hadronically decaying W or Z boson and transverse momentum imbalance at root s=13 TeV**
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- DLXXXIX. **Measurement of quarkonium production cross sections in pp collisions at root s=13 TeV**
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- CDXC. **Search for the X(5568) State Decaying into B-s(0)pi(+/-) in Proton-Proton Collisions at root s=8 TeV**
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- CDXCI. **Search for lepton-flavor violating decays of heavy resonances and quantum black holes to e mu final states in proton-proton collisions at root s=13 TeV**
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- CDXCII. **Measurement of the Lambda(b) polarization and angular parameters in Lambda(b) -> J/psi Lambda decays from pp collisions at root s=7 and 8 TeV**
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- CDXCIII. **Search for massive resonances decaying into WW, WZ, ZZ, qW, and qZ with dijet final states at root s=13 TeV**
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- CDXCIV. **Measurement of the associated production of a single top quark and a Z boson in pp collisions at, root s=13 TeV**
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- CDXCV. **Search for vectorlike light-flavor quark partners in proton-proton collisions at root s=8 TeV**
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- CDXCVI. **Measurement of associated Z + charm production in proton-proton collisions at sqrt(s)=8TeV**
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- CDXCVII. **Measurement of the Splitting Function in ITpp ITand Pb-Pb Collisions at rootITsNNIT=5.02 TeV**
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- CDXCVIII. **Observation of the Higgs boson decay to a pair of tau leptons with the CMS detector**
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- CDXCIX. **Search for supersymmetry with Higgs boson to diphoton decays using the razor variables at root $s=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
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- D. **Search for pair production of vector-like quarks in the $bW(b)\overline{W}$ channel from proton-proton collisions at root $s=13$ TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
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- DI. **Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at $\sqrt{s} = 13$ TeV**
Sirunyan A., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.
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- DII. **Suppression of Excited gamma States Relative to the Ground State in Pb-Pb Collisions at root $s(NN)=5.02$ TeV**
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- DIII. **Measurement of normalized differential $t(t)\overline{t}$ cross sections in the dilepton channel from pp collisions at root $s=13$ TeV**
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- DIV. **Constraints on the chiral magnetic effect using charge-dependent azimuthal correlations in pPb and PbPb collisions at the CERN Large Hadron Collider**
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- DV. **Combined search for electroweak production of charginos and neutralinos 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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- DVI. **Search for electroweak production of charginos and neutralinos 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., Brondolin E., Dragicevic M., Ero J., et al.
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- DVII. **Measurement of differential cross sections in the kinematic angular variable ϕ^* for inclusive Z boson production in pp 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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- DVIII. **Measurement of the inclusive $t(t)\overline{t}$ cross section in pp collisions root $s=5.02$ TeV using final states with at least one charged lepton**
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- DIX. **Search for natural supersymmetry in events with top quark pairs and photons in pp collisions at**

root s=8 TeV

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

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

- DX. Search for ZZ resonances in the 2l2v final state in proton-proton collisions at 13 TeV**
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- DXI. Study of dijet events with a large rapidity gap between the two leading jets in pp collisions at $\sqrt{s}=7\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.
European Physical Journal C, vol.78, no.3, 2018 (SCI-Expanded)
- DXII. Search for new phenomena in final states with two opposite-charge, same-flavor leptons, jets, and missing transverse momentum in pp collisions at root s=13TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- DXIII. Search for pair production of excited top quarks in the lepton plus jets final state 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.778, pp.349-370, 2018 (SCI-Expanded)
- DXIV. Comparing transverse momentum balance of b jet pairs in pp and PbPb collisions at root s(NN)=5.02 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- DXV. Search for the pair production of third-generation squarks with two-body decays to a bottom or charm quark and a neutralino in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
PHYSICS LETTERS B, vol.778, pp.263-291, 2018 (SCI-Expanded)
- DXVI. Search for Higgs boson pair production in events with two bottom quarks and two tau leptons in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
PHYSICS LETTERS B, vol.778, pp.101-127, 2018 (SCI-Expanded)
- DXVII. Observation of Correlated Azimuthal Anisotropy Fourier Harmonics in pp and p plus Pb Collisions at the LHC**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
PHYSICAL REVIEW LETTERS, vol.120, no.9, 2018 (SCI-Expanded)
- DXVIII. Observation of Electroweak Production of Same-Sign W Boson Pairs in the Two Jet and Two Same-Sign Lepton Final State in Proton-Proton Collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
PHYSICAL REVIEW LETTERS, vol.120, no.8, 2018 (SCI-Expanded)
- DXIX. Search for supersymmetry in events with at least three electrons or muons, jets, and missing transverse momentum in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic

- M., Eroee J., et al.
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- DXX. **Constraintson the double-parton scattering cross section from same-sign W boson pair production in proton-proton collisions at root s=8TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.
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- DXXI. **Search for standard model production of four top quarks with same-sign and multilepton final states in 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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- DXXII. **Measurements of the $p p \rightarrow Z Z$ production cross section and the $Z \rightarrow 4 \ell$ branching fraction, and constraints on anomalous triple gauge couplings 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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- DXXIII. **Inclusive Search for a Highly Boosted Higgs Boson Decaying to a Bottom Quark-Antiquark Pair**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.
 PHYSICAL REVIEW LETTERS, vol.120, no.7, 2018 (SCI-Expanded)
- DXXIV. **Search for top squarks and dark matter particles in opposite-charge dilepton final states at root s=13 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.
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- DXXV. **Search for heavy resonances decaying to a top quark and a bottom quark in the lepton plus jets final state in proton-proton collisions at 13 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.
 PHYSICS LETTERS B, vol.777, pp.39-63, 2018 (SCI-Expanded)
- DXXVI. **Search for Higgsino pair production in pp collisions at root s=13 TeV in final states with large missing transverse momentum and two Higgs bosons decaying via $H \rightarrow b(\bar{b})$**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.
 PHYSICAL REVIEW D, vol.97, no.3, 2018 (SCI-Expanded)
- DXXVII. **Azimuthal anisotropy of charged particles with transverse momentum up to 100GeV/c in PbPb collisions at root S-NN=5.02 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., Flechl M., et al.
 PHYSICS LETTERS B, vol.776, pp.195-216, 2018 (SCI-Expanded)
- DXXVIII. **Combination of inclusive and differential $t(\bar{t})$ charge asymmetry measurements using ATLAS and CMS data at root S=7 and 8 TeV**
 Aaboud M. y., Aad G., Abbott B., Abidinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
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- DXXIX. **Brightness and uniformity measurements of plastic scintillator tiles at the CERN H2 test beam**
 Chatrchyan S., Sirunyan A. M., Tumasyan A., Litomin A., Mossolov V., Shumeiko N., Van de Klundert M., Van Haevermaet H., Van Mechelen P., Van Spilbeeck A., et al.
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- DXXX. **Search for resonant and nonresonant Higgs boson pair production in the $b(\bar{b})\nu\bar{\nu}$ final**

state in proton-proton collisions at root s=13 TeV

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

JOURNAL OF HIGH ENERGY PHYSICS, no.1, 2018 (SCI-Expanded)

DXXXI. Search for supersymmetry in proton-proton collisions at 13 TeV using identified top quarks

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

PHYSICAL REVIEW D, vol.97, no.1, 2018 (SCI-Expanded)

DXXXII. Pseudorapidity distributions of charged hadrons in proton-lead collisions at root s(NN)=5.02 and 8.16 TeV

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

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.1, 2018 (SCI-Expanded)

DXXXIII. Measurements of $t(\bar{t})$ cross sections in association with b jets and inclusive jets and their ratio using dilepton final states in pp collisions at root s=13 TeV

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

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

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

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

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, pp.1-36, 2018 (SCI-Expanded)

DXXXV. 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., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.1, 2018 (SCI-Expanded)

DXXXVI. Search for $t(\bar{t})$ production in the all-jet final state in proton-proton collisions root s=13 TeV

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

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, pp.1-45, 2018 (SCI-Expanded)

DXXXVII. Search for a heavy composite Majorana neutrino in the final state with two leptons and two quarks at root s=13 TeV

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

PHYSICS LETTERS B, vol.775, pp.315-337, 2017 (SCI-Expanded)

DXXXVIII. Observation of Top Quark Production in Proton-Nucleus Collisions

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

PHYSICAL REVIEW LETTERS, vol.119, no.24, 2017 (SCI-Expanded)

DXXXIX. Constraints on anomalous Higgs boson couplings using production and decay information in the four-lepton final state

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

PHYSICS LETTERS B, vol.775, pp.1-24, 2017 (SCI-Expanded)

DXL. Search for Evidence of the Type-III Seesaw Mechanism 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., Brondolin E., Dragicevic M., Eroe J., et al.

PHYSICAL REVIEW LETTERS, vol.119, no.22, 2017 (SCI-Expanded)

- DXLI. Search for dark matter produced in association with heavy-flavor quark pairs in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., Flechl M., et al.
European Physical Journal C, vol.77, no.12, 2017 (SCI-Expanded)
- DXLII. Search for supersymmetry in events with at least one photon, missing transverse momentum, and large transverse event activity in proton-proton collisions at root $s=13\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.
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- DXLIII. Principal-component analysis of two-particle azimuthal correlations in PbPb and pPb collisions at CMS**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.
PHYSICAL REVIEW C, vol.96, no.6, 2017 (SCI-Expanded)
- DXLIV. Radioactive source calibration test of the CMS Hadron Endcap Calorimeter test wedge with Phase I upgrade electronics**
Chatrchyan S., Sirunyan A. M., Tumasyan A., Litomin A., Mossolov V., Shumeiko N., De Klundert M. V., Van Haeveermaet H., Van Mechelen P., Van Spilbeeck A., et al.
JOURNAL OF INSTRUMENTATION, vol.12, 2017 (SCI-Expanded)
- DXLV. Measurement of charged pion, kaon, and proton production in proton-proton collisions at root $s=13\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., Flechl M., et al.
PHYSICAL REVIEW D, vol.96, no.11, 2017 (SCI-Expanded)
- DXLVI. Search for pair production of vector-like T and B quarks in single-lepton final states using boosted jet substructure in proton-proton collisions at root $s=13\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.11, 2017 (SCI-Expanded)
- DXLVII. Measurements of the associated production of a Z boson and b jets in pp collisions at $\sqrt{s}=8\text{TeV}$**
Khachatryan V., Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.
European Physical Journal C, vol.77, no.11, 2017 (SCI-Expanded)
- DXLVIII. CMS Collaboration**
Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., Flechl M., et al.
Nuclear Physics A, vol.967, pp.965-982, 2017 (SCI-Expanded)
- DXLIX. Search for black holes and other new phenomena in high-multiplicity final states in proton-proton collisions at root $s=13\text{TeV}$**
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PHYSICS LETTERS B, vol.774, pp.279-307, 2017 (SCI-Expanded)
- DL. Search for a light pseudoscalar Higgs boson produced in association with bottom quarks in pp collisions at root $s=8\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroee J., et al.
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- DLI. Combination of searches for heavy resonances decaying to WW, WZ, ZZ, WH, and ZH boson pairs in proton-proton collisions at root $s=8$ and 13TeV**

- Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
PHYSICS LETTERS B, vol.774, pp.533-558, 2017 (SCI-Expanded)
- DLII. **Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Eroe J., Flechl M., et al.
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- DLIII. **Measurement of the triple-differential dijet cross section in proton-proton collisions at $\sqrt{s}=8\text{TeV}$ and constraints on parton distribution functions**
Sirunyan A., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., Flechl M., et al.
European Physical Journal C, vol.77, no.11, 2017 (SCI-Expanded)
- DLIV. **Measurement of vector boson scattering and constraints on anomalous quartic couplings from events with four leptons and two 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., Brondolin E., Dragicevic M., Eroe J., et al.
PHYSICS LETTERS B, vol.774, pp.682-705, 2017 (SCI-Expanded)
- DLV. **Search for electroweak production of charginos and neutralinos in WH events in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- DLVI. **Measurement of the differential cross sections for the associated production of a W boson and jets in proton-proton collisions at s =13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- DLVII. **Particle-flow reconstruction and global event description with the CMS detector**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
Journal of Instrumentation, vol.12, no.10, 2017 (SCI-Expanded)
- DLVIII. **Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at root s=8 TeV**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- DLIX. **Search for top squark pair production in pp collisions at root s=13 TeV using single lepton events**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- DLX. **Search for new physics in the monophoton final state in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
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- DLXI. **Measurements of the pp \rightarrow W gamma gamma and pp \rightarrow Z gamma gamma cross sections and limits on anomalous quartic gauge couplings at root s=8 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
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- DLXII. **Measurements of jet charge with dijet events in pp collisions at root s=8 TeV**

- Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.
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- DLXIII. **Search for Charged Higgs Bosons Produced via Vector Boson Fusion and Decaying into a Pair of W and Z Bosons Using pp Collisions at root s=13 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.
 PHYSICAL REVIEW LETTERS, vol.119, no.14, 2017 (SCI-Expanded)
- DLXIV. **Search for leptophobic Z ' bosons decaying into four-lepton final states in proton-proton collisions at root s=8 TeV**
 Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
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- DLXV. **Search for Higgs boson pair production in the bb tau state in proton-proton collisions at root(s)=8 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.
 PHYSICAL REVIEW D, vol.96, no.7, 2017 (SCI-Expanded)
- DLXVI. **Measurement of the B-+/- Meson Nuclear Modification Factor in Pb-Pb Collisions at root s(NN)=5.02 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.
 PHYSICAL REVIEW LETTERS, vol.119, no.15, 2017 (SCI-Expanded)
- DLXVII. **Measurement of the semileptonic t(t)over-bar plus gamma production cross section in pp collisions at root s=8 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.
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- DLXVIII. **Search for Supersymmetry in pp Collisions at root s=13 TeV in the Single-Lepton Final State Using the Sum of Masses of Large-Radius Jets**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., et al.
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- DLXIX. **Search for direct production of supersymmetric partners of the top quark in the all-jets final state in proton-proton collisions at sqrt(s)=13 TeV**
 Sirunyan A., Tumasyan A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Erö J., et al.
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- DLXX. **Search for associated production of dark matter with a Higgs boson decaying to b(b)over-bar or gamma gamma at root s=13 TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Ero J., Flechl M., et al.
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- DLXXI. **Search for new phenomena with the MT 2 variable in the all-hadronic final state produced in proton-proton collisions at sqrt(s)=13TeV**
 Sirunyan A. M., Tumasyan A., Johnson A., Adam W., Ambrogio F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., et al.
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- DLXXII. **Search for heavy resonances that decay into a vector boson and a Higgs boson in hadronic final states at sqrt(s)=13TeV**
 Sirunyan A. M., Tumasyan A., Adam W., Ambrogio E., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic

- M., Eroe J., et al.
European Physical Journal C, vol.77, no.9, 2017 (SCI-Expanded)
- DLXXIII. **Search for a heavy resonance decaying to a top quark and a vector-like top quark at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
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- DLXXIV. **Search for single production of vector-like quarks decaying into a b quark and a W boson in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
PHYSICS LETTERS B, vol.772, pp.634-656, 2017 (SCI-Expanded)
- DLXXV. **Measurement of the t(t)-bar production cross section using events with one lepton and at least one jet in pp collisions at root s=13 TeV**
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- DLXXVI. **Search for standard model production of four top quarks in proton-proton collisions at root s=13TeV**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
PHYSICS LETTERS B, vol.772, pp.336-358, 2017 (SCI-Expanded)
- DLXXVII. **Search for Low Mass Vector Resonances Decaying to 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., Brondolin E., Dragicevic M., Eroe J., et al.
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- DLXXVIII. **Search for high-mass Z gamma resonances in proton-proton collisions at root s=8 and 13 TeV using jet substructure techniques**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
PHYSICS LETTERS B, vol.772, pp.363-387, 2017 (SCI-Expanded)
- DLXXIX. **Measurements of the charm jet cross section and nuclear modification factor in pPb collisions at root sNN=5.02TeV**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
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- DLXXX. **Search for physics beyond the standard model in events with two leptons of same sign, missing transverse momentum, and jets in proton-proton collisions at sqrt(s)=13TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambrogi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
European Physical Journal C, vol.77, no.9, 2017 (SCI-Expanded)
- DLXXXI. **Coherent J/psi photoproduction in ultra-peripheral PbPb collisions at root s(NN)=2.76 TeV with the CMS experiment**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
PHYSICS LETTERS B, vol.772, pp.489-511, 2017 (SCI-Expanded)
- DLXXXII. **Search for new phenomena with multiple charged leptons in proton-proton collisions at root s=13TeV**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- DLXXXIII. **Cross section measurement of t-channel single top quark production in pp collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
PHYSICS LETTERS B, vol.772, pp.752-776, 2017 (SCI-Expanded)
- DLXXXIV. **Study of Jet Quenching with Z plus jet Correlations in Pb-Pb and pp Collisions at root s(NN)=5.02 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
PHYSICAL REVIEW LETTERS, vol.119, no.8, 2017 (SCI-Expanded)
- DLXXXV. **Measurement of the top quark mass in the dileptonic t(t)over-bar decay channel using the mass observables M-bl, M-T2, and M-blv in pp collisions at root=8 TeV**
Sirunyan A. M., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
PHYSICAL REVIEW D, vol.96, no.3, 2017 (SCI-Expanded)
- DLXXXVI. **Measurement of the inclusive energy spectrum in the very forward direction in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
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- DLXXXVII. **Search for single production of a heavy vector-like T quark decaying to a Higgs boson and a top quark with a lepton and jets in the final state**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
PHYSICS LETTERS B, vol.771, pp.80-105, 2017 (SCI-Expanded)
- DLXXXVIII. **Search for top quark partners with charge 5/3 in proton-proton collisions at root s=13 TeV**
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- DLXXXIX. **Search for supersymmetry in multijet events with missing transverse momentum in proton-proton collisions at 13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Ambroggi F., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- DXC. **Searches for W ' bosons decaying to a top quark and a bottom quark in proton-proton collisions at 13TeV**
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- DXCI. **Measurement of the differential inclusive B+ hadron cross sections in pp collisions at root s=13TeV**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
PHYSICS LETTERS B, vol.771, pp.435-456, 2017 (SCI-Expanded)
- DXCII. **Pseudorapidity dependence of long-range two-particle correlations in pPb collisions at root sNN=5.02 TeV**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
PHYSICAL REVIEW C, vol.96, no.1, 2017 (SCI-Expanded)
- DXCIII. **Measurement of the jet mass in highly boosted t(t)over-bar events from pp collisions at root s=8TeV**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J.,

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- DXCIV. Suppression of $\gamma(1S)$, $\gamma(2S)$, and $\gamma(3S)$ quarkonium states in PbPb collisions at $\sqrt{s_{NN}}=2.76\text{TeV}$**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICS LETTERS B, vol.770, pp.357-379, 2017 (SCI-Expanded)
- DXCV. Search for heavy gauge W' bosons in events with an energetic lepton and large missing transverse momentum at $\sqrt{s}=13\text{TeV}$**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICS LETTERS B, vol.770, pp.278-301, 2017 (SCI-Expanded)
- DXCVI. Search for supersymmetry in the all-hadronic final state using top quark tagging in pp collisions at $\sqrt{s}=13\text{TeV}$**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
PHYSICAL REVIEW D, vol.96, no.1, 2017 (SCI-Expanded)
- DXCVII. Measurement of inclusive jet cross sections in pp and PbPb collisions at $\sqrt{s_{NN}}=2.76\text{TeV}$**
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- DXCVIII. Measurement of the cross section for electroweak production of $Z\gamma$ in association with two jets and constraints on anomalous quartic gauge couplings in proton-proton collisions at $\sqrt{s}=8\text{TeV}$**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., et al.
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- DXCIX. Search for $t(\bar{t})$ resonances in highly boosted lepton plus jets and fully hadronic final states in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., Flechl M., et al.
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- DC. Search for dark matter produced with an energetic jet or a hadronically decaying W or Z boson at $\sqrt{s}=13\text{TeV}$**
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- DCI. Search for associated production of a Z boson with a single top quark and for tZ flavour-changing interactions in pp collisions at $\sqrt{s}=8\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., Flechl M., et al.
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- DCII. Search for new physics with dijet angular distributions in proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., Flechl M., et al.
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- DCIII. Measurement of double-differential cross sections for top quark pair production in pp collisions at $\sqrt{s}=8\text{TeV}$ and impact on parton distribution functions**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroo J., Flechl M., et al.

- EUROPEAN PHYSICAL JOURNAL C, vol.77, no.7, 2017 (SCI-Expanded)
- DCIV. **Search for third-generation scalar leptoquarks and heavy right-handed neutrinos in final states with two tau leptons and two jets in proton-proton collisions at root s=13 TeV**
Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., Flechl M., et al.
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- DCV. **Search for supersymmetry in events with photons and missing transverse energy in pp collisions at 13 TeV**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- DCVI. **Measurement of electroweak-induced production of W gamma with two jets in pp collisions at root s=8TeV and constraints on anomalous quartic gauge couplings**
Khachatryan V., Sirunyan A. M., Tumasyan A., Adam W., Asilar E., Bergauer T., Brandstetter J., Brondolin E., Dragicevic M., Eroe J., et al.
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- DCVII. **Search for dijet resonances in proton-proton collisions at root s=13 TeV and constraints on dark matter and other models**
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- DCXIII. **A search for new phenomena in pp collisions at root s=13TeV in final states with missing transverse momentum and at least one jet using the alpha(T) variable**
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- DCXIV. **Search for single production of vector-like quarks decaying to a Z boson and a top or a bottom quark**

in proton-proton collisions at root s=13 TeV

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- DCXV. **Measurement of differential cross sections for top quark pair production using the lepton plus jets final state in proton-proton collisions at 13 TeV**
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- DCXX. **Suppression and azimuthal anisotropy of prompt and nonprompt J/psi production in PbPb collisions at root S-NN=2.76 TeV**
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- DCXXIII. **Search for top squark pair production in compressed-mass-spectrum scenarios in proton-proton collisions at root s=8 TeV using the alpha(T) variable**
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DCXXXVI. **Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at root s=8 TeV and cross section ratios to 2.76 and 7 TeV**

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DCXXXVII. **Search for massive resonances decaying in to WW,WZ or ZZ bosons in proton-proton collisions at root s=13 TeV**

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DCXXXIX. **Jet energy scale and resolution in the CMS experiment in pp collisions at 8 TeV**

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DCXL. **Measurement of the transverse momentum spectra of weak vector bosons produced in proton-proton collisions at root s=8TeV**

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DCXLI. **Evidence for collectivity in pp collisions at the LHC**

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DCXLIII. **Search for heavy resonances decaying to tau lepton pairs in proton-proton collisions at root s=13 TeV**

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DCXLIV. **Measurement of the production cross section of a W boson in association with two b jets in pp collisions at root s=8TeV**

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DCXLV. **Search for anomalous Wtb couplings and flavour-changing neutral currents in t-channel single top quark production in pp collisions at root s=7 and 8 TeV**

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- DCLXVI. **Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at root s(NN)=2.76 TeV**
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- DCLXIX. **Phenomenological MSSM interpretation of CMS searches in pp collisions at root s=7 and 8 TeV**
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DCCIV. **Measurement of inclusive jet production and nuclear modifications in pPb collisions at $\sqrt{s(NN)}=5.02$ TeV**

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- DCCXVI. **Search for heavy Majorana neutrinos in $e(+/-)e(+/-)+$ jets and $e(+/-)\mu(+/-)+$ jet events in proton-proton collisions at $\sqrt{s}=8$ TeV**
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- DCCXLV. **Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at root s=8TeV**
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- DCCLXV. **Measurement of the Z boson differential cross section in transverse momentum and rapidity in proton-proton collisions at 8 TeV**
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in proton-proton collisions at 8TeV

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DCCLXVIII. Search for a Higgs boson in the mass range from 145 to 1000 GeV decaying to a pair of W or Z bosons

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DCCLXIX. Search for supersymmetry with photons in pp collisions at root s=8 TeV

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DCCLXX. Measurement of the underlying event activity using charged-particle jets in proton-proton collisions at root s=2.76 TeV

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DCCLXXI. Search for neutral color-octet weak-triplet scalar particles in proton-proton collisions at root s=8TeV

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DCCLXXIII. Evidence for transverse-momentum- and pseudorapidity-dependent event-plane fluctuations in PbPb and pPb collisions

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DCCLXXIV. Search for a pseudoscalar boson decaying into a Z boson and the 125 GeV Higgs boson in l(+)(-)(b)(b)over-bar final states

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DCCLXXV. Search for narrow high-mass resonances in proton-proton collisions at root s=8 TeV decaying to a Z and a Higgs boson

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DCCLXXVI. Search for the standard model Higgs boson produced through vector boson fusion and decaying to b(b)over-bar

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CCLXXVII. Performance of photon reconstruction and identification with the CMS detector in proton-proton collisions at root s=8TeV

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- CLXXXVII. **Performance of electron reconstruction and selection with the CMS detector in proton-proton collisions at $\sqrt{s}=8$ TeV**
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