

Luca Pernié

Selected Publication List

Analysis note, physics notes and publications Phys. Rev. D Resonant Di-Higgs Production in the bbWW Channel: Probing the Electroweak 96 (2017) Phase Transition at the LHC, doi:10.1103/PhysRevD.96.035007 CMS PAS A Search for BSM Light Bosons Decaying into Muon Pairs HIG-16-035 CMS AN A Search for Beyond Standard Model Light Bosons Decaying into Muon Pairs 2016-044 CMS Performance of Track-based Muon Alignment. DP-2016/053 Eur. Phys. J. Measurements of the ZZ production cross sections in the $2l2\nu$ channel in protonproton collisions at $\sqrt{s}=7$ and 8 TeV and combined constraints on triple gauge couplings. CMS Simulation studies on precise timing information during High Luminosity LHC. CR-2015/101 NIMA vol. Response of microchannel plates to single particles and to electromagnetic showers 797 (Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, doi:10.1016/j.nima.2015.06.057) CMS CR Measurement of the ZZ production cross section in the $2I2\nu$ decay channel and 2014/181 limits on anomalous triple gauge couplings (preliminary results). CMS AN Performance of jets and missing transverse energy with fast ECAL timing. 2014/088 CMS DN Studies on a precision timing electromagnetic calorimeter for the CMS upgrade. 2014/06 CMS CR ZZ cross section measurements and limits on anomalous coupling constants for 013/453 neutral triple gauge boson. CMS AN Bounding the Higgs width using Z to II events with high missing transverse energy. 2013/411 CMS AN CMS ECAL calibration with π^0 and η in the LHC RUN1. 2013/344

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CMS AN Search for Z(\rightarrow II) H(\rightarrow invisible) at \sqrt{s}= 7 and 8 TeV.
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2013/333

CMS CR Evolution of the response of the CMS ECAL, and upgrade design options for

2013/284 electromagnetic calorimetry at the HL-LHC, CMS Conference report.

CMS PAS Measurements of the ZZ production cross sections in the 2l2nu channel in proton-

SMP-12-016 proton collisions at sqrt(s) = 7 and 8 TeV and combined constraints on triple gauge couplings.

CMS AN Search for a high-mass Higgs boson in the $H o ZZ o 2l2\nu$ decay channel in pp

2012/371 collisions with the CMS detector.

CMS AN Measurement of ${\it ZZ}$ production cross section at 7 and 8 TeV and anomalous gauge

2012/148 couplings limits in 2l2v decay channel.

CMS AN Search for the Higgs boson in the $H \to ZZ \to 2l2\nu$ decay channel in pp collisions

2012/138 with the CMS detector.

CMS AN Search for Invisible Higgs Decays in the $ZH \rightarrow ll + \text{MET}$ channel.

2012/123

CMS AN Search for a Standard Model Higgs boson in the decay channel $H \to WW \to lvjj$.

2012/004

CMS AN Search for Higgs Boson Decays to two W Bosons in the Fully Leptonic Final State

2011/432 with Full 2011 pp Dataset at $\sqrt{s}=7$ TeV.

CMS AN Search for a Standard Model Higgs boson produced via vector boson fusion, in the

2011/110 decay channel $H \to WW \to lvjj$.

Publications in the CMS collaboration

1. "Search for pair production of vector-like quarks in the bW $\overline{\rm b}$ W channel from proton-proton collisions at $\sqrt{s}=$ 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1710.01539 [hep-ex]

CMS-B2G-17-003, CERN-EP-2017-224

2. "Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=$ 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1710.00159 [hep-ex]

CMS-EXO-17-001, CERN-EP-2017-235

3. "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"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1709.09814 [hep-ex]

CMS-SUS-16-042, CERN-EP-2017-201

4. "Observation of correlated azimuthal anisotropy Fourier harmonics in pp and pPb collisions at the LHC"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1709.09189 [nucl-ex]

CMS-HIN-16-022. CERN-EP-2017-220

5. "Search for new phenomena in final states with two opposite-charge, same-flavor leptons, jets, and missing transverse momentum in pp collisions at $\sqrt{s}=$ 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1709.08908 [hep-ex]

CMS-SUS-16-034, CERN-EP-2017-170

6. "Measurements of the pp \to ZZ production cross section and the Z \to 4ℓ branching fraction, and constraints on anomalous triple gauge couplings at $\sqrt{s}=$ 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1709.08601 [hep-ex]

CMS-SMP-16-017, CERN-EP-2017-219

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

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1709.07497 [hep-ex]

CMS-HIG-16-044, CERN-EP-2017-233

8. "Observation of top quark production in proton-nucleus collisions"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1709.07411 [nucl-ex]

CMS-HIN-17-002, CERN-EP-2017-239

9. "Observation of electroweak production of same-sign W boson pairs in the two jet and two same-sign lepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1709.05822 [hep-ex]

CMS-SMP-17-004, CERN-EP-2017-232

10. "Inclusive search for a highly boosted Higgs boson decaying to a bottom quark-antiquark pair"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1709.05543 [hep-ex]

CMS-HIG-17-010, CERN-EP-2017-207

11. "Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at $\sqrt{s}=$ 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1709.05406 [hep-ex]

CMS-SUS-16-039, CERN-EP-2017-121

12. "Combination of inclusive and differential $t\bar{t}$ charge asymmetry measurements using AT-LAS and CMS data at $\sqrt{s}=$ 7 and 8 TeV"

M. Aaboud et al. [ATLAS and CMS Collaborations].

arXiv:1709.05327 [hep-ex]

CMS-TOP-15-016, ATLAS-TOPQ-2016-16, CERN-EP-2017-236

13. "Search for higgsino pair production in pp collisions at $\sqrt{s}=13$ TeV in final states with large missing transverse momentum and two Higgs bosons decaying via $H \to b \bar{b}$ "

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1709.04896 [hep-ex]

CMS-SUS-16-044, CERN-EP-2017-127

14. "Search for supersymmetry with Higgs boson to diphoton decays using the razor variables at $\sqrt{s}=$ 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1709.00384 [hep-ex]

CMS-SUS-16-045, CERN-EP-2017-158

15. "Measurement of the splitting function in pp and PbPb collisions at $\sqrt{s_{_{
m NN}}}=$ 5.02 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.09429 [nucl-ex]

CMS-HIN-16-006, CERN-EP-2017-205

16. "Challenges to the chiral magnetic wave using charge-dependent azimuthal anisotropies in pPb and PbPb collisions at $\sqrt{[b]s_{_{
m NN}}}=$ 5.02 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.08901 [nucl-ex]

CMS-HIN-16-0017, CERN-EP-2017-180

17. "Search for heavy resonances decaying to a top quark and a bottom quark in the lepton+jets final state in proton-proton collisions at 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.08539 [hep-ex]

CMS-B2G-17-010, CERN-EP-2017-196

18. "Search for evidence of the type-III seesaw mechanism in multilepton final states in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.07962 [hep-ex]

CMS-EXO-17-006, CERN-EP-2017-194

19. "Measurement of normalized differential t-tbar cross sections in the dilepton channel from pp collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.07638 [hep-ex]

CMS-TOP-16-007, CERN-EP-2017-120

20. "Principal-component analysis of two-particle azimuthal correlations in PbPb and pPb collisions at CMS"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.07113 [nucl-ex]

CMS-HIN-15-010, CERN-EP-2017-133

21. "Search for massive resonances decaying into WW, WZ, ZZ, qW, and qZ with dijet final states at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.05379 [hep-ex]

CMS-B2G-17-001, CERN-EP-2017-184

22. "Nuclear modification factor of D0 mesons in PbPb collisions at sqrt(s[NN]) = 5.02 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.04962 [nucl-ex]

CMS-HIN-16-001, CERN-EP-2017-186

23. "Search for resonant and nonresonant Higgs boson pair production in the bblnulnu final state in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.04188 [hep-ex]

CMS-HIG-17-006, CERN-EP-2017-168

24. "Measurement of prompt D^0 meson azimuthal anisotropy in PbPb collisions at $\sqrt{s_{NN}}$ = 5.02 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.03497 [nucl-ex]

CMS-HIN-16-007, CERN-EP-2017-174

25. "Measurement of vector boson scattering and constraints on anomalous quartic couplings

from events with four leptons and two jets in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.02812 [hep-ex]

CMS-SMP-17-006, CERN-EP-2017-177

26. "Search for vector-like light-flavor quark partners in proton-proton collisions at sqrt(s)=8 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.02510 [hep-ex]

CMS-B2G-12-016, CERN-EP-2017-145

27. "Constraints on the chiral magnetic effect using charge-dependent azimuthal correlations in pPb and PbPb collisions at the LHC"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.01602 [nucl-ex]

CMS-HIN-17-001, CERN-EP-2017-193

28. "Search for single production of a vector-like T quark decaying to a Z boson and a top quark in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.01062 [hep-ex]

CMS-B2G-17-007, CERN-EP-2017-155

29. "Observation of the Higgs boson decay to a pair of tau leptons"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1708.00373 [hep-ex]

CMS-HIG-16-043, CERN-EP-2017-181

30. "Search for a light pseudoscalar Higgs boson produced in association with bottom quarks in pp collisions at sqrt(s)=8 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1707.07283 [hep-ex]

CMS-HIG-15-009, CERN-EP-2017-159

31. "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 sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1707.07274 [hep-ex]

CMS-SUS-16-032, CERN-EP-2017-144

32. "Search for supersymmetry in events with at least one photon, missing transverse momentum, and large transverse event activity in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1707.06193 [hep-ex]

CMS-SUS-16-047, CERN-EP-2017-130

33. "Measurement of the differential cross sections for the associated production of a W boson and jets in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1707.05979 [hep-ex]

CMS-SMP-16-005, CERN-EP-2017-142

34. "Search for natural supersymmetry in events with top quark pairs and photons in pp collisions at sqrt(s) = 8 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1707.03325 [hep-ex]

CMS-SUS-15-009, CERN-EP-2017-124

35. "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"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1707.03316 [hep-ex]

DOI:10.1007/JHEP10(2017)005

JHEP **1710**, 005 (2017)

CMS-SUS-16-049, CERN-EP-2017-129

36. "Search for Higgs boson pair production in events with two bottom quarks and two tau leptons in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1707.02909 [hep-ex]

CMS-HIG-17-002, CERN-EP-2017-126

37. "Search for heavy resonances that decay into a vector boson and a Higgs boson in hadronic final states at $\sqrt{s}=13$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1707.01303 [hep-ex]

DOI:10.1140/epjc/s10052-017-5192-z

Eur. Phys. J. C 77, no. 9, 636 (2017)

CMS-B2G-17-002, CERN-EP-2017-128

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

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1707.00541 [hep-ex]

CMS-HIG-17-011, CERN-EP-2017-143

39. "A search for Higgs boson pair production in the bbtautau final state in proton-proton collisions at sqrt(s) = 8 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1707.00350 [hep-ex]

CMS-HIG-215-013, CERN-EP-2017-104

40. "Measurement of charged pion, kaon, and proton production in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.10194 [hep-ex]

CMS-FSQ-16-004, CERN-EP-2017-091

41. "Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.09936 [hep-ex]

CMS-HIG-16-041, CERN-EP-2017-123

42. "Search for electroweak production of charginos and neutralinos in WH events in protonproton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.09933 [hep-ex]

CMS-SUS-16-043, CERN-EP-2017-113

43. "Search for a heavy composite Majorana neutrino in the final state with two leptons and two quarks at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.08578 [hep-ex]

CMS-EXO-16-026, CERN-EP-2017-125

44. "Exclusive and semi-exclusive pi+pi- production in proton-proton collisions at sqrt(s) =

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7 TeV"
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V. Khachatryan et al. [CMS Collaboration].

arXiv:1706.08310 [hep-ex]

CMS-FSQ-12-004, CERN-EP-2016-261

45. "Measurement of the semileptonic $t\bar{t}+\hat{\bf l}$ ş production cross section in pp collisions at $\sqrt{s}=8$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.08128 [hep-ex]

DOI:10.1007/JHEP10(2017)006

JHEP **1710**, 006 (2017)

CMS-TOP-14-008, CERN-EP-2017-112

46. "Suppression of excited Upsilon states relative to the ground state in PbPb collisions at sqrt(sNN) = 5.02 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.05984 [hep-ex]

CMS-HIN-16-008, CERN-EP-2017-080

47. "Measurements of jet charge with dijet events in pp collisions at $\sqrt{s} = 8$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.05868 [hep-ex]

CMS-SMP-15-003, CERN-EP-2017-085

48. "Particle-flow reconstruction and global event description with the CMS detector"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.04965 [physics.ins-det]

CMS-PRF-14-001, CERN-EP-2017-110

49. "Search for top squark pair production in pp collisions at sqrt(s)=13 TeV using single lepton events"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.04402 [hep-ex]

CMS-SUS-16-051, CERN-EP-2017-109

50. "Searches for WâĂš bosons decaying to a top quark and a bottom quark in proton-proton collisions at 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.04260 [hep-ex]

DOI:10.1007/JHEP08(2017)029

JHEP **1708**, 029 (2017)

CMS-B2G-16-016, CERN-EP-2017-090

51. "Search for new physics in the monophoton final state in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.03794 [hep-ex]

CMS-EXO-16-039, CERN-EP-2017-097

52. "Search for pair production of vector-like T and B quarks in single-lepton final states using boosted jet substructure techniques at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1706.03408 [hep-ex]

CMS-B2G-16-024, CERN-EP-2017-107

53. "Search for dark matter produced in association with heavy-flavor quarks in proton-proton collisions at sqrt(s)=13 TeV"

A. M. Sirunyan *et al.* [CMS Collaboration].

arXiv:1706.02581 [hep-ex]

CMS-EXO-16-005. CERN-EP-2017-087

54. "Search for top quark partners with charge 5/3 in proton-proton collisions at $\sqrt{s}=13$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1705.10967 [hep-ex]

DOI:10.1007/JHEP08(2017)073

JHEP 1708, 073 (2017)

CMS-B2G-15-006, CERN-EP-2017-102

55. "Search for Low Mass Vector Resonances Decaying to Quark-Antiquark Pairs in Proton-Proton Collisions at $\sqrt{s}=13~{
m TeV}$ "

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1705.10532 [hep-ex]

DOI:10.1103/PhysRevLett.119.111802

Phys. Rev. Lett. 119, no. 11, 111802 (2017)

CMS-EXO-16-030, CERN-EP-2017-098

56. "Measurements of ttbar cross sections in association with b jets and inclusive jets and their ratio using dilepton final states in pp collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1705.10141 [hep-ex]

CMS-TOP-16-010, CERN-EP-2017-069

57. "Combination of searches for heavy resonances decaying to WW, WZ, ZZ, WH, and ZH boson pairs in proton-proton collisions at sqrt(s) = 8 and 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1705.09171 [hep-ex]

CMS-B2G-16-007, CERN-EP-2017-077

58. "Measurement of B+/- meson differential production cross sections in pp and PbPb collisions at sqrt(s[NN]) = 5.02 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1705.04727 [hep-ex]

CMS-HIN-16-011, CERN-EP-2017-076

59. "Search for supersymmetry in pp collisions at sqrt(s) = 13 TeV in the single-lepton final state using the sum of masses of large-radius jets"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1705.04673 [hep-ex]

CMS-SUS-16-037, CERN-EP-2017-088

60. "Search for new phenomena with the MT2 variable in the all-hadronic final state produced in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1705.04650 [hep-ex]

CMS-SUS-16-036, CERN-EP-2017-084

61. "Search for Charged Higgs Bosons Produced via Vector Boson Fusion and Decaying into a Pair of W and Z Bosons Using pp Collisions at $\sqrt{s}=13~{\rm TeV}$ "

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1705.02942 [hep-ex]

DOI:10.1103/PhysRevLett.119.141802

Phys. Rev. Lett. 119, no. 14, 141802 (2017)

CMS-HIG-16-027, CERN-EP-2017-068

62. "Measurement of the triple-differential dijet cross section in proton-proton collisions at sqrt(s) = 8 TeV and constraints on parton distribution functions"

A. M. Sirunyan et al. [CMS Collaboration].

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arXiv:1705.02628 [hep-ex] CMS-SMP-16-011, CERN-EP-2017-061
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63. "Search for black holes in high-multiplicity final states in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1705.01403 [hep-ex]

CMS-EXO-15-007, CERN-EP-2017-074

64. "Search for supersymmetry in multijet events with missing transverse momentum in proton-proton collisions at 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1704.07781 [hep-ex]

DOI:10.1103/PhysRevD.96.032003

Phys. Rev. D 96, no. 3, 032003 (2017)

CMS-SUS-16-033, CERN-EP-2017-072

65. "Search for physics beyond the standard model in events with two leptons of same sign, missing transverse momentum, and jets in protonâĂŞproton collisions at $\sqrt{s}=13\,\text{TeV}$ "

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1704.07323 [hep-ex]

DOI:10.1140/epjc/s10052-017-5079-z

Eur. Phys. J. C 77, no. 9, 578 (2017)

CMS-SUS-16-035, CERN-EP-2017-071

66. "Measurement of the top quark mass in the dileptonic $t\bar{t}$ decay channel using the mass observables $M_{b\ell}$, M_{T2} , and $M_{b\ell\nu}$ in pp collisions at $\sqrt{s}=8$ âĂĽTeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1704.06142 [hep-ex]

DOI:10.1103/PhysRevD.96.032002

Phys. Rev. D 96, no. 3, 032002 (2017)

CMS-TOP-15-008, CERN-EP-2017-050

67. "Search for $t\bar{t}$ resonances in highly boosted lepton+jets and fully hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1704.03366 [hep-ex]

DOI:10.1007/JHEP07(2017)001

JHEP 1707, 001 (2017)

CMS-B2G-16-015, CERN-EP-2017-049

68. "Measurements of the $pp \to W\gamma\gamma$ and $pp \to Z\gamma\gamma$ cross sections and limits on anomalous quartic gauge couplings at $\sqrt{s}=$ 8 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1704.00366 [hep-ex]

CMS-SMP-15-008, CERN-EP-2017-039

69. "Search for new physics with dijet angular distributions in proton-proton collisions at $\sqrt{s}=13~\text{TeV}\text{"}$

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1703.09986 [hep-ex]

DOI:10.1007/JHEP07(2017)013

JHEP 1707, 013 (2017)

CMS-EXO-15-009, CERN-EP-2017-047

70. "Search for a heavy resonance decaying to a top quark and a vector-like top quark at $\sqrt{s}=13~\text{TeV}"$

A. M. Sirunyan et al. [CMS Collaboration].

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arXiv:1703.06352 [hep-ex]
DOI:10.1007/JHEP09(2017)053
JHEP 1709, 053 (2017)
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CMS-B2G-16-013, CERN-EP-2017-035

71. "Measurement of the jet mass in highly boosted $t\bar{t}$ events from pp collisions at $\sqrt{s}=8$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1703.06330 [hep-ex]

DOI:10.1140/epjc/s10052-017-5030-3

Eur. Phys. J. C 77, no. 7, 467 (2017)

CMS-TOP-15-015, CERN-EP-2017-018

72. "Search for anomalous couplings in boosted $WW/WZ \to \ell \nu q \bar{q}$ production in proton-proton collisions at $\sqrt{s}=$ 8 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1703.06095 [hep-ex]

DOI:10.1016/j.physletb.2017.06.009

Phys. Lett. B 772, 21 (2017)

CMS-SMP-13-008, CERN-EP-2017-029

73. "Search for associated production of dark matter with a Higgs boson decaying to $b\bar{b}$ or $\gamma\gamma$ at $\sqrt{s}=$ 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1703.05236 [hep-ex]

CMS-EXO-16-012, CERN-EP-2017-027

74. "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 $\sqrt{s} = 13$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1703.03995 [hep-ex]

DOI:10.1007/JHEP07(2017)121

JHEP **1707**, 121 (2017)

CMS-EXO-16-023, CERN-EP-2017-025

75. "Measurement of the top quark mass using single top quark events in proton-proton collisions at $\sqrt{s}=8$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1703.02530 [hep-ex]

DOI:10.1140/epjc/s10052-017-4912-8

Eur. Phys. J. C 77, no. 5, 354 (2017)

CMS-TOP-15-001, CERN-EP-2017-012

76. "Search for dark matter produced with an energetic jet or a hadronically decaying W or Z boson at $\sqrt{s}=13$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1703.01651 [hep-ex]

DOI:10.1007/JHEP07(2017)014

JHEP **1707**, 014 (2017)

CMS-EXO-16-037, CERN-EP-2017-031

77. "Measurement of double-differential cross sections for top quark pair production in pp collisions at $\sqrt{s}=8$ TeV and impact on parton distribution functions"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1703.01630 [hep-ex]

DOI:10.1140/epjc/s10052-017-4984-5

Eur. Phys. J. C 77, no. 7, 459 (2017)

CMS-TOP-14-013. CERN-EP-2017-030

78. "Search for standard model production of four top quarks in proton-proton collisions at $\sqrt{s}=$ 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1702.06164 [hep-ex]

DOI:10.1016/j.physletb.2017.06.064

Phys. Lett. B 772, 336 (2017)

CMS-TOP-16-016, CERN-EP-2017-023

79. "Measurement of the cross section for electroweak production of ${\bf Z}\gamma$ in association with two jets and constraints on anomalous quartic gauge couplings in protonâĂŞproton collisions at $\sqrt{s}=8$ TeV"

V. Khachatryan et al. [CMS Collaboration].

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80. "Measurement of prompt and nonprompt J/ψ production in pp and pPb collisions at $\sqrt{s_{\rm NN}}=5.02\,{\rm TeV}$ "

A. M. Sirunyan et al. [CMS Collaboration].

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81. "Search for associated production of a Z boson with a single top quark and for tZ flavour-changing interactions in pp collisions at $\sqrt{s}=8$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1702.01404 [hep-ex]

DOI:10.1007/JHEP07(2017)003

JHEP **1707**, 003 (2017)

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82. "Study of Jet Quenching with $Z+{
m jet}$ Correlations in Pb-Pb and pp Collisions at $\sqrt{s}_{NN}=5.02~{
m TeV}$ "

A. M. Sirunyan et al. [CMS Collaboration].

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DOI:10.1103/PhysRevLett.119.082301

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83. "Azimuthal anisotropy of charged particles with transverse momentum up to 100 GeV in PbPb collisions at $\sqrt{s_{NN}}$ = 5.02 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1702.00630 [hep-ex]

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84. "Measurement of the inclusive energy spectrum in the very forward direction in proton-proton collisions at $\sqrt{s}=13$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1701.08695 [hep-ex]

DOI:10.1007/JHEP08(2017)046

JHEP 1708, 046 (2017)

CMS-FSQ-16-002, CERN-EP-2016-313

85. "Search for single production of vector-like quarks decaying into a b quark and a W

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boson in proton-proton collisions at \sqrt{s}= 13 TeV"
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arXiv:1701.08328 [hep-ex]

DOI:10.1016/j.physletb.2017.07.022

Phys. Lett. B 772, 634 (2017)

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86. "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 $\sqrt{s}=13$ TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1701.07409 [hep-ex]

DOI:10.1007/JHEP05(2017)029

JHEP 1705, 029 (2017)

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87. "Search for new phenomena with multiple charged leptons in protonâĂŞproton collisions at $\sqrt{s}=13~$ TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1701.06940 [hep-ex]

DOI:10.1140/epjc/s10052-017-5182-1

Eur. Phys. J. C 77, no. 9, 635 (2017)

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88. "Measurement of the $t\bar{t}$ production cross section using events with one lepton and at least one jet in pp collisions at $\sqrt{s}=$ 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1701.06228 [hep-ex]

DOI:10.1007/JHEP09(2017)051

JHEP 1709, 051 (2017)

CMS-TOP-16-006, CERN-EP-2016-321

89. "Search for dark matter and unparticles in events with a Z boson and missing transverse momentum in proton-proton collisions at sqrt(s) = 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

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DOI:10.1007/JHEP09(2017)106, 10.1007/JHEP03(2017)061

JHEP **1703**, 061 (2017), Erratum: [JHEP **1709**, 106 (2017)]

CMS-EXO-16-010, CERN-EP-2016-309, FERMILAB-PUB-17-011-CMS

90. "Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at \sqrt{s} = 8 TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1701.02032 [hep-ex]

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91. "Mechanical stability of the CMS strip tracker measured with a laser alignment system"

A. M. Sirunyan et al. [CMS Collaboration].

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JINST 12, no. 04, P04023 (2017)

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92. "Search for supersymmetry in the all-hadronic final state using top quark tagging in pp collisions at $\sqrt{s}=13$ TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1701.01954 [hep-ex]

DOI:10.1103/PhysRevD.96.012004

Phys. Rev. D **96**, no. 1, 012004 (2017) CMS-SUS-16-009, CERN-EP-2016-293

93. "Search for leptophobic Z' bosons decaying into four-lepton final states in proton-proton collisions at sqrt(s) = 8 TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1701.01345 [hep-ex]

DOI:10.1016/j.physletb.2017.08.069

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CMS-EXO-14-006, CERN-EP-2016-295

94. "Search for high-mass $Z\gamma$ resonances in proton-proton collisions at $\sqrt{s}=$ 8 and 13 TeV using jet substructure techniques"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1612.09516 [hep-ex]

DOI:10.1016/j.physletb.2017.06.062

Phys. Lett. B 772, 363 (2017)

CMS-EXO-16-025, CERN-EP-2016-300

95. "Search for heavy gauge W' boson in events with an energetic lepton and large missing transverse momentum at $\sqrt{s}=$ 13 TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1612.09274 [hep-ex]

DOI:10.1016/j.physletb.2017.04.043

Phys. Lett. B 770, 278 (2017)

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96. "Measurement of electroweak-induced production of W γ with two jets in pp collisions at $\sqrt{s}=8$ TeV and constraints on anomalous quartic gauge couplings"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1612.09256 [hep-ex]

DOI:10.1007/JHEP06(2017)106

JHEP **1706**, 106 (2017)

CMS-SMP-14-011, CERN-EP-2016-289

97. "Search for massive resonances decaying into WW, WZ or ZZ bosons in proton-proton collisions at $\sqrt{s}=$ 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1612.09159 [hep-ex]

DOI:10.1007/JHEP03(2017)162

JHEP 1703, 162 (2017)

CMS-B2G-16-004, CERN-EP-2016-296

98. "Measurements of the charm jet cross section and nuclear modification factor in pPb collisions at $\sqrt{s_{NN}}=$ 5.02 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1612.08972 [nucl-ex]

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Phys. Lett. B 772, 306 (2017)

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99. "Search for electroweak production of a vector-like quark decaying to a top quark and a Higgs boson using boosted topologies in fully hadronic final states"

A. M. Sirunyan et al. [CMS Collaboration].

arXiv:1612.05336 [hep-ex]

DOI:10.1007/JHEP04(2017)136

JHEP 1704, 136 (2017)

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100. "Searches for pair production of third-generation squarks in $\sqrt{s}=13\,$ TeV pp collisions"

A. M. Sirunyan et al. [CMS Collaboration].

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DOI:10.1140/epjc/s10052-017-4853-2

Eur. Phys. J. C 77, no. 5, 327 (2017)

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101. "Search for heavy neutrinos or third-generation leptoquarks in final states with two hadronically decaying τ leptons and two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1612.01190 [hep-ex]

DOI:10.1007/JHEP03(2017)077

JHEP 1703, 077 (2017)

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102. "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"

V. Khachatryan et al. [CMS Collaboration].

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DOI:10.1016/j.physletb.2017.05.019

Phys. Lett. B 771, 80 (2017)

CMS-B2G-15-008, CERN-EP-2016-279

103. "Search for CP violation in $t\bar{t}$ production and decay in proton-proton collisions at $\sqrt{s}=8$ TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1611.08931 [hep-ex]

DOI:10.1007/JHEP03(2017)101

JHEP **1703**, 101 (2017)

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104. "Search for supersymmetry in events with photons and missing transverse energy in pp collisions at 13 TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1611.06604 [hep-ex]

DOI:10.1016/j.physletb.2017.04.005

Phys. Lett. B 769, 391 (2017)

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105. "Search for heavy resonances decaying to tau lepton pairs in proton-proton collisions at $\sqrt{s}=13~\text{TeV}"$

V. Khachatryan et al. [CMS Collaboration].

arXiv:1611.06594 [hep-ex]

DOI:10.1007/JHEP02(2017)048

JHEP **1702**, 048 (2017)

CMS-EXO-16-008, CERN-EP-2016-273

106. "Measurements of the associated production of a Z boson and b jets in pp collisions at $\sqrt{s}=$ 8 TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1611.06507 [hep-ex]

CMS-SMP-14-010, CERN-EP-2016-254

107. "Measurement of the $t\bar{t}$ production cross section using events in the e μ final state in pp collisions at $\sqrt{s}=$ 13 TeV"

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V. Khachatryan et al. [CMS Collaboration].
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     DOI:10.1140/epjc/s10052-017-4718-8
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     CMS-TOP-16-005, CERN-EP-2016-265
108. "Measurements of differential production cross sections for a Z boson in association
    with jets in pp collisions at \sqrt{s} = 8 TeV"
    V. Khachatryan et al. [CMS Collaboration].
     arXiv:1611.03844 [hep-ex]
     DOI:10.1007/JHEP04(2017)022
    JHEP 1704, 022 (2017)
    CMS-SMP-14-013, CERN-EP-2016-256
109. "Search for dijet resonances in protonâĂŞproton collisions at \sqrt{s} = 13 TeV and con-
    straints on dark matter and other models"
    A. M. Sirunyan et al. [CMS Collaboration].
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     Phys. Lett. B 769, 520 (2017), Erratum: [Phys. Lett. B 772, 882 (2017)]
     CMS-EXO-16-032, CERN-EP-2016-277
110. "Charged-particle nuclear modification factors in PbPb and pPb collisions at \sqrt{s_{\mathrm{N~N}}} = 5.02
    V. Khachatryan et al. [CMS Collaboration].
     arXiv:1611.01664 [nucl-ex]
     DOI:10.1007/JHEP04(2017)039
     JHEP 1704, 039 (2017)
    CMS-HIN-15-015, CERN-EP-2016-242
111. "Suppression of \Upsilon(1S), \Upsilon(2S) and \Upsilon(3S) production in PbPb collisions at \sqrt{s_{NN}} = 2.76
    TeV"
    V. Khachatryan et al. [CMS Collaboration].
     arXiv:1611.01510 [nucl-ex]
     DOI:10.1016/j.physletb.2017.04.031
     Phys. Lett. B 770, 357 (2017)
     CMS-HIN-15-001, CERN-EP-2016-248
112. "Relative Modification of Prompt ÏĹ(2S) and J/ÏĹ Yields from pp to PbPb Collisions at
     \sqrt{s_{NN}}=5.02âĂĽTeV"
     A. M. Sirunyan et al. [CMS Collaboration].
     arXiv:1611.01438 [nucl-ex]
     DOI:10.1103/PhysRevLett.118.162301
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    CMS-HIN-16-004, CERN-EP-2016-258
113. "A search for new phenomena in pp collisions at \sqrt{s} = 13 TeV in final states with missing
    transverse momentum and at least one jet using the \alpha_T variable"
    V. Khachatryan et al. [CMS Collaboration].
     arXiv:1611.00338 [hep-ex]
     DOI:10.1140/epjc/s10052-017-4787-8
     Eur. Phys. J. C 77, no. 5, 294 (2017)
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114. "Measurement of the mass difference between top quark and antiquark in pp collisions
     at \sqrt{s} = 8 TeV"
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S. Chatrchyan et al. [CMS Collaboration].

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     DOI:10.1016/j.physletb.2017.04.028
     Phys. Lett. B 770, 50 (2017)
     CMS-TOP-12-031, CERN-EP-2016-249
115. "Searches for invisible decays of the Higgs boson in pp collisions at sqrt(s) = 7, 8, and
    13 TeV"
    V. Khachatryan et al. [CMS Collaboration].
    arXiv:1610.09218 [hep-ex]
     DOI:10.1007/JHEP02(2017)135
    JHEP 1702, 135 (2017)
    CMS-HIG-16-016, CERN-EP-2016-240
116. "Search for heavy resonances decaying into a vector boson and a Higgs boson in final
    states with charged leptons, neutrinos, and b quarks"
    V. Khachatryan et al. [CMS Collaboration].
     arXiv:1610.08066 [hep-ex]
     DOI:10.1016/j.physletb.2017.02.040
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     CMS-B2G-16-003, CERN-EP-2016-226
117. "Observation of \Upsilon(1S) pair production in proton-proton collisions at \sqrt{s}=8 TeV"
    V. Khachatryan et al. [CMS Collaboration].
    arXiv:1610.07095 [hep-ex]
     DOI:10.1007/JHEP05(2017)013
    JHEP 1705, 013 (2017)
    CMS-BPH-14-008, CERN-EP-2016-237
118. "Search for R-parity violating supersymmetry with displaced vertices in proton-proton
    collisions at \sqrt{s} = 8 TeV"
    V. Khachatryan et al. [CMS Collaboration].
     arXiv:1610.05133 [hep-ex]
     DOI:10.1103/PhysRevD.95.012009
     Phys. Rev. D 95, no. 1, 012009 (2017)
    CMS-SUS-14-020, CERN-EP-2016-224
119. "Search for electroweak production of charginos in final states with two ÏD leptons in
    pp collisions at \sqrt{s} = 8 TeV"
    V. Khachatryan et al. [CMS Collaboration].
     arXiv:1610.04870 [hep-ex]
     DOI:10.1007/JHEP04(2017)018
    JHEP 1704, 018 (2017)
    CMS-SUS-14-022, CERN-EP-2016-225
120. "Search for top quark decays via Higgs-boson-mediated flavor-changing neutral currents
    in pp collisions at \sqrt{s} = 8 TeV"
    V. Khachatryan et al. [CMS Collaboration].
     arXiv:1610.04857 [hep-ex]
     DOI:10.1007/JHEP02(2017)079
    JHEP 1702, 079 (2017)
    CMS-TOP-13-017, CERN-EP-2016-208
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V. Khachatryan et al. [CMS Collaboration].

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DOI:10.1103/PhysRevD.95.052002

Phys. Rev. D 95, 052002 (2017)

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122. "Measurement of differential cross sections for top quark pair production using the lepton+jets final state in proton-proton collisions at 13 TeV"

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arXiv:1610.04191 [hep-ex]

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Phys. Rev. D 95, no. 9, 092001 (2017)

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123. "Search for anomalous Wtb couplings and flavour-changing neutral currents in t-channel single top quark production in pp collisions at $\sqrt{s} = 7$ and 8 TeV"

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arXiv:1610.03545 [hep-ex]

DOI:10.1007/JHEP02(2017)028

JHEP 1702, 028 (2017)

CMS-TOP-14-007, CERN-EP-2016-207

124. "Search for high-mass Z γ resonances in $e^+e^-\gamma$ and $\mu^+\mu^-\gamma$ final states in proton-proton collisions at $\sqrt{s}=$ 8 and 13 TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1610.02960 [hep-ex]

DOI:10.1007/JHEP01(2017)076

JHEP **1701**, 076 (2017)

CMS-EXO-16-021, CERN-EP-2016-230

125. "Cross section measurement of t-channel single top quark production in pp collisions at $\sqrt{s}=$ 13 TeV"

A. M. Sirunyan et al. [CMS Collaboration].

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DOI:10.1016/j.physletb.2017.07.047

Phys. Lett. B 772, 752 (2017)

CMS-TOP-16-003, CERN-EP-2016-233

126. "Suppression and azimuthal anisotropy of prompt and nonprompt J/ψ production in PbPb collisions at $\sqrt{s_{\rm NN}}=2.76~{\rm TeV}$ "

V. Khachatryan et al. [CMS Collaboration].

arXiv:1610.00613 [nucl-ex]

DOI:10.1140/epic/s10052-017-4781-1

Eur. Phys. J. C 77, no. 4, 252 (2017)

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127. "Observation of charge-dependent azimuthal correlations in *p*-Pb collisions and its implication for the search for the chiral magnetic effect"

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DOI:10.1103/PhysRevLett.118.122301

Phys. Rev. Lett. 118, no. 12, 122301 (2017)

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128. "Search for supersymmetry in events with one lepton and multiple jets in proton-proton collisions at $\sqrt{=}$ 13 TeV"

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arXiv:1609.09386 [hep-ex]

DOI:10.1103/PhysRevD.95.012011

Phys. Rev. D 95, no. 1, 012011 (2017)

CMS-SUS-15-006. CERN-EP-2016-239

129. "Search for long-lived charged particles in proton-proton collisions at $\sqrt{s}=$ 13âĂĽâĂĽTeV"

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Phys. Rev. D **94**, no. 11, 112004 (2016)

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130. "Inclusive search for supersymmetry using razor variables in pp collisions at $\sqrt{s}=$ 13âĂĽâĂĽTeV"

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arXiv:1609.07658 [hep-ex]

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Phys. Rev. D 95, no. 1, 012003 (2017)

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131. "Measurement of the WZ production cross section in pp collisions at $\sqrt{s}=7$ and 8 TeV and search for anomalous triple gauge couplings at $\sqrt{s}=8$ TeV"

V. Khachatryan et al. [CMS Collaboration].

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DOI:10.1140/epjc/s10052-017-4730-z

Eur. Phys. J. C 77, no. 4, 236 (2017)

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132. "Search for narrow resonances in dilepton mass spectra in proton-proton collisions at \sqrt{s} = 13 TeV and combination with 8 TeV data"

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arXiv:1609.05391 [hep-ex]

DOI:10.1016/j.physletb.2017.02.010

Phys. Lett. B 768, 57 (2017)

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133. "Measurement of inclusive jet cross sections in pp and PbPb collisions at $\sqrt{s_{NN}}=$ 2.76 TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1609.05383 [nucl-ex]

DOI:10.1103/PhysRevC.96.015202

Phys. Rev. C 96, no. 1, 015202 (2017)

CMS-HIN-13-005, CERN-EP-2016-217

134. "Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at $\sqrt{s}=8$ TeV and cross section ratios to 2.76 and 7 TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1609.05331 [hep-ex]

DOI:10.1007/JHEP03(2017)156

JHEP 1703, 156 (2017)

CMS-SMP-14-001, CERN-EP-2016-196

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

V. Khachatryan et al. [CMS Collaboration].

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Phys. Rev. D 94, no. 11, 112005 (2016)

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136. "Search for high-mass diphoton resonances in protonâĂŞproton collisions at 13 TeV and

combination with 8 TeV search"

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arXiv:1609.02507 [hep-ex]

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Phys. Lett. B 767, 147 (2017)

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137. "Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at $\sqrt{s_{\rm N~N}}=2.76$ TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1609.02466 [nucl-ex]

DOI:10.1007/JHEP11(2016)055

JHEP **1611**, 055 (2016)

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138. "The CMS trigger system"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1609.02366 [physics.ins-det]

DOI:10.1088/1748-0221/12/01/P01020

JINST 12, no. 01, P01020 (2017)

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139. "Measurement of the total and differential inclusive B^+ hadron cross sections in pp collisions at $\sqrt{s}=$ 13 TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1609.00873 [hep-ex]

DOI:10.1016/j.physletb.2017.05.074

Phys. Lett. B 771, 435 (2017)

CMS-BPH-15-004, CERN-EP-2016-198

140. "Measurement of the production cross section of a W boson in association with two b jets in pp collisions at $\sqrt{s}=8\,\mathrm{TeV}$ "

V. Khachatryan et al. [CMS Collaboration].

arXiv:1608.07561 [hep-ex]

DOI:10.1140/epjc/s10052-016-4573-z

Eur. Phys. J. C 77, no. 2, 92 (2017)

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141. "Measurement of the mass of the top quark in decays with a J/ψ meson in pp collisions at 8 TeV"

V. Khachatryan et al. [CMS Collaboration].

arXiv:1608.03560 [hep-ex]

DOI:10.1007/JHEP12(2016)123

JHEP **1612**, 123 (2016)

CMS-TOP-15-014, CERN-EP-2016-202

142. "Search for new phenomena in events with high jet multiplicity and low missing transverse momentum in protonâĂŞproton collisions at $\sqrt{s}=8$ TeV"

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Phys. Lett. B 770, 257 (2017)

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143. "Measurement of the ZZ production cross section and Z $\rightarrow \ell^+\ell^-\ell'^+\ell'^-$ branching fraction in pp collisions at \sqrt{s} =13 TeV"

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     DOI:10.1016/j.physletb.2017.09.030, 10.1016/j.physletb.2016.10.054
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144. "Measurement of electroweak production of a W boson and two forward jets in proton-
     proton collisions at \sqrt{s} = 8 TeV"
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145. "Measurement of the WZ production cross section in pp collisions at \sqrt(s) = 13 TeV"
    V. Khachatryan et al. [CMS Collaboration].
     arXiv:1607.06943 [hep-ex]
     DOI:10.1016/j.physletb.2017.01.011
     Phys. Lett. B 766, 268 (2017)
    CMS-SMP-16-002, CERN-EP-2016-169
146. "Search for dark matter in proton-proton collisions at 8 TeV with missing transverse
    momentum and vector boson tagged jets"
    V. Khachatryan et al. [CMS Collaboration].
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