

Dr. Sarmad Masood SHAHEEN

PERSONAL DATA

PLACE AND DATE OF BIRTH: Toba Tek Singh, Punjab, Pakistan | 30th September 1987
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WORK EXPERIENCE

2020 - Present	<p><i>University of Sahiwal, Sahiwal, Pakistan</i> <i>Assistant Professor</i> Department of Physics, University of Sahiwal.</p>
2018 - 2019	<p><i>The university of Lahore, Lahore, Pakistan</i> <i>Assistant Professor</i> I re-joined University of Lahore on 14th January 2018 as an assistant professor and worked till July, 2019. <i>MPhil./PhD. research coordinator</i> I also performed my duties as MPhil./PhD. research coordinator and took initiatives to enhance the research activities during my tenure. <i>Courses Taught:</i> Computational Physics Classical Mechanics Infinite Sequence and Series</p>
2012 - 2018	<p><i>Institute of High Energy Physics, Beijing, China.</i> <i>Doctoral Researcher</i> During my doctoral research, I was engaged in : → B Meson properties measurement at $\sqrt{s} = 7$ TeV → Searches for an excited bottom quark → b-jet Identification at CMS → Data Acquisition (DAQ) operations.</p>

EDUCATION

2012-2017	<p>PhD, IHEP, Chinese Academy of Science, Beijing, China. Major: Particle and Nuclear Physics <i>Thesis: "Measurement of production cross sections times branching fractions of $Bc^+ \rightarrow J/\psi\pi^+$ and $B^+ \rightarrow J/\psi K^+$ in p-p collisions at $\sqrt{s} = 7$ TeV at CMS"</i> <i>Advisor: Prof. Chen Guoming</i></p>
2010-2012	<p>Master of Philosophy CHEP, University of the Punjab, Lahore, Pakistan Major: Particle and Nuclear Physics <i>Thesis: "Study of weak decays of Charmonia"</i> <i>Advisor: Prof. Haris Rasheed, Dr. Abrar Ahmad ZAFER</i></p>
2005-2009	<p>Bachelor of Science CHEP, University of the Punjab, Lahore, Pakistan Major: Computational Physics</p>

SCHOLARSHIPS AND CERTIFICATES

2012: Doctoral Student Scholarship
2011: Departmental Scholarship
2008: Departmental Scholarship
2007: Departmental Scholarship

LANGUAGES

ENGLISH: Fluent
CHINESE: Basic Knowledge
PUNJABI: Mother Language
URDU: Fluent

COMPUTER SKILLS

OPERATING SYSTEMS : Linux, Windows, Mac
PROGRAMMING: c++, Python, Shell
SCIENTIFIC TOOL: CERN Root, Mathematica, MadGraph, PYTHIA, MC@NLO, LaTeX
OFFICE : Microsoft Office, LibreOffice

CONFERENCES, SCHOOL AND WORKSHOPS

2019 International Workshop on Computation in Particle Physics , Pakistan (Speaker + Conference Secretary)
2018 International Conference on Recent Advances in Materials Science and Photo-Catalysis, UOL(Organiser)
2018 International Conference on Recent Advances in Physics , Pakistan. (Speaker)
2017 12th International Workshop on Heavy Quarkonium , China (Speaker)
2017 Int. Sym. on Lepton Photon Interactions GuangZhou, China (Poster Presenter)
2017 Large Hadron Collider Physics, Shanghai.(Speaker)
2016 Chinese Large Hadron Collider Physics Beijing, China(Speaker)
2016 Asia Europe Pecific School on High Energy Physics, Beijing, China.(Participant)
2016 Chinese Phy. HEP Academic, Heifei, China(Speaker)
2014 Xth Rencontres du Vietnam, Flavour Physics Conference, Quy Nhon Viet Nam(Speaker)
2013 Int. Sym. on Higgs Physis, Beijing, China(Participant)
2013 Future High Energy Circular Colliders, Beijing, China(Participant)
2012 37th INSC on Physics and contemp. needs, Pakistan(Participant)
2012 Int. Scientific Spring, Islamabad, Pakistan, Pakistan(Participant)

COMMUNICATION EXPERIENCES

- I have an experience of working with CMS experiment (CERN) which provides a competitive and multicultural environment to excel.
- I have been consistently involved in the documentation, presentations and maintenance of the wiki pages of the analysis work. I have been also the contact person for the mainstream work, I was involved in.
- I have also worked on the b-jet identification at CMS and have updated the related algorithm to use for the colleagues for further study.
- I was a part of the team who was responsible in controlling large detector data taking operations from proton-proton collisions at CERN.
- Some of my contributions have been published in high impact factor scientific journals. I have also presented many important data analysis results on behalf of the CMS collaboration at well renowned international conferences.

RESEARCH EXPERIENCE

- PhD. *Measurement of production cross sections times branching fractions of $Bc^+ \rightarrow J/\psi\pi^+$ and $B^+ \rightarrow J/\psi K^+$ in p-p collisions at $\sqrt{s} = 7 \text{ TeV}$ at CMS.*

The $Bc^+(\bar{B}c^-)$ meson is a ground state of the $\bar{b}c(b\bar{c})$ system and contains two heavy quarks of different flavors, \bar{b} and c quarks. The $\bar{b}c$ system is an intermediate state between the charmonium and bottomonium systems. Being the carrier of the two different flavors, it provides ground for the study of heavy-quark dynamics which is different from those provided by $c\bar{c}$ and $b\bar{b}$ quarkonia. The study of heavy quark production in high energy hadronic interactions plays a critical role in testing next-to-leading order (NLO) Quantum Chromodynamics (QCD) and more recent predictions by fixed order plus next-to-leading-logarithms (FONLL). A precise measurements of the B^+ and Bc^+ cross sections times branching fraction at CMS will provide useful information on the production mechanism of B^+ and Bc^+ mesons. In this paper, the measurements of the production cross section times branching ratio of $B_c^+ \rightarrow J/\psi$ and $B^+ \rightarrow K^+$ at 7 TeV center of mass energy are reported as a function of b hadron transverse momentum p_T and rapidity $|y|$. Using the large $B^+ \rightarrow J/\psi K^+$ sample, the differential cross section $d\sigma/d(B^+) \times \text{BR}$ for small and large rapidity events are investigated separately. The results are compared with the theoretical predictions based on QCD. ([CMS-PAS-BPH-13-002](#))

Searches for an excited bottom Quark

There are variety of models that predict the existence of excited quarks, such as Randall-Sundrum models and models with a heavy gluon partner. Searches for excited quarks have been performed at the CERN LHC and elsewhere. These searches focus on the strong and electroweak interactions of the excited quark with the SM up- or down-type quarks. This study reports on a search by the CMS Collaboration, using the tW decay mode, for an excited third-generation bottom quark (b^*), which preferentially couples to the third-generation SM quarks. This analysis searches for a singly produced b^* decaying to a top quark and a W boson. I was also involved in the signal generation, framework development and background estimation for the ongoing excited bottom quark searches at 13 TeV in lepton + boosted jet decay channel. ([JHEP 01 \(2016\) 166](#))

b-jet identification

The identification of the jets, originating from the b-quarks, plays a vital role in the searches for the new physics process or the measurement of the Standard model process at Large Hadron Collider. The Compact Muon Solenoid (CMS) experiment has developed a large variety of algorithms to identify the b-quark jets which utilises the characteristic properties such as the impact parameter of charged particle tracks, the properties of the reconstructed decay vertices and the presence/absence of a lepton. The soul purpose of this study was to investigate the new variables which have the potential to increase the tagging efficiency. The studied variables were deployed to the main algorithm to perform the further investigations/studies such as Multi-variable analysis. ([CMS BTV-13-001](#))

REFERENCES

- Prof. Guoming Chen, IHEP CAS, Beijing, China.
Professor and Group Leader of CMS-IHEP Group, Ph.D. thesis advisor
Contact: chengm@ihep.ac.cn, +86-10-88236097
- Prof. Dr. Martino Margoni, Universita e INFN, Padova

CMS B Phys group Convenor
Contact: margoni@padova.infn.it

- Prof. Dr. Zheng Huaqiao, IHEP CAS, Beijing, China.
Contact: Huaqiao.Zhang@cern.ch

LIST OF PUBLICATIONS

1. “**Evidence for WW production from double-parton interactions in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1909.06265 [hep-ex]
DOI:10.1140/epjc/s10052-019-7541-6
Eur. Phys. J. C **80**, no. 1, 41 (2020)
CMS-SMP-18-015, CERN-EP-2019-167 <http://inspirehep.net/record/1753976> 5 citations counted in INSPIRE as of 13 Feb 2020
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:1909.04114 [hep-ex]
DOI:10.1103/PhysRevD.100.112007
Phys. Rev. D **100**, no. 11, 112007 (2019)
CMS-EXO-18-012, CERN-EP-2019-176 <http://inspirehep.net/record/1753375> 2 citations counted in INSPIRE as of 13 Feb 2020
3. “**Search for a charged Higgs boson decaying into top and bottom quarks in events with electrons or muons in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1908.09206 [hep-ex]
DOI:10.1007/JHEP01(2020)096
JHEP **2001**, 096 (2020)
CMS-HIG-18-004, CERN-EP-2019-164 <http://inspirehep.net/record/1751230> 6 citations counted in INSPIRE as of 13 Feb 2020
4. “**Search for supersymmetry using Higgs boson to diphoton decays at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1908.08500 [hep-ex]
DOI:10.1007/JHEP11(2019)109
JHEP **1911**, 109 (2019)
CMS-SUS-18-007, CERN-EP-2019-171 <http://inspirehep.net/record/1750601> 2 citations counted in INSPIRE as of 13 Feb 2020
5. “**Measurement of the average very forward energy as a function of the track multiplicity at central pseudorapidities in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1908.01750 [hep-ex]
DOI:10.1140/epjc/s10052-019-7402-3
Eur. Phys. J. C **79**, no. 11, 893 (2019)
CMS-FSQ-18-001, CERN-EP-2019-146, CMS-FSQ-18-001-003 <http://inspirehep.net/record/1747892> 1 citations counted in INSPIRE as of 13 Feb 2020
6. “**Search for anomalous triple gauge couplings in WW and WZ production in lepton + jet events in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1907.08354 [hep-ex]
DOI:10.1007/JHEP12(2019)062
JHEP **1912**, 062 (2019)

CMS-SMP-18-008, CERN-EP-2019-137 <http://inspirehep.net/record/1744608> 5 citations counted in INSPIRE as of 13 Feb 2020

7. “**Measurements of triple-differential cross sections for inclusive isolated-photon+jet events in pp collisions at $\sqrt{s} = 8$ TeV”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1907.08155 [hep-ex]
DOI:10.1140/epjc/s10052-019-7451-7
Eur. Phys. J. C **79**, no. 11, 969 (2019)
CMS-SMP-16-016, CERN-EP-2019-127 <http://inspirehep.net/record/1744422> 1 citations counted in INSPIRE as of 13 Feb 2020
8. “**Search for light pseudoscalar boson pairs produced from decays of the 125 GeV Higgs boson in final states with two muons and two nearby tracks in pp collisions at $\sqrt{s} = 13$ TeV”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1907.07235 [hep-ex]
DOI:10.1016/j.physletb.2019.135087
Phys. Lett. B **800**, 135087 (2020)
CMS-HIG-18-006, CERN-EP-2019-105 <http://inspirehep.net/record/1744267> 6 citations counted in INSPIRE as of 13 Feb 2020
9. “**Search for physics beyond the standard model in events with overlapping photons and jets”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1907.06275 [hep-ex]
DOI:10.1103/PhysRevLett.123.241801
Phys. Rev. Lett. **123**, no. 24, 241801 (2019)
FERMILAB-PUB-19-427-CMS, CMS-B2G-18-007, CERN-EP-2019-135 <http://inspirehep.net/record/1743890>
10. “**Study of the $B^+ \rightarrow J/\psi \bar{\Lambda} p$ decay in proton-proton collisions at $\sqrt{s} = 8$ TeV”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1907.05461 [hep-ex]
DOI:10.1007/JHEP12(2019)100
JHEP **1912**, 100 (2019)
CMS-BPH-18-005, CERN-EP-2019-128 <http://inspirehep.net/record/1743799> 3 citations counted in INSPIRE as of 13 Feb 2020
11. “**Measurement of the top quark polarization and tt spin correlations using dilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1907.03729 [hep-ex]
DOI:10.1103/PhysRevD.100.072002
Phys. Rev. D **100**, no. 7, 072002 (2019)
CMS-TOP-18-006, CERN-EP-2019-073, CMS-PAS-TOP-18-006 <http://inspirehep.net/record/1742786> 9 citations counted in INSPIRE as of 13 Feb 2020
12. “**Search for MSSM Higgs bosons decaying to $\mu^+ \mu^-$ in proton-proton collisions at $\sqrt{s} = 13$ TeVSearch for MSSM Higgs bosons decaying to ? + ? ? in proton-proton collisions at s=13TeV”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1907.03152 [hep-ex]
DOI:10.1016/j.physletb.2019.134992
Phys. Lett. B **798**, 134992 (2019)
CMS-HIG-18-010, CERN-EP-2019-109 <http://inspirehep.net/record/1742776> 4 citations counted in INSPIRE as of 13 Feb 2020
13. “**Measurement of the top quark Yukawa coupling from tt kinematic distributions in**

the lepton+jets final state in proton-proton collisions at $\sqrt{s} = 13$ TeV”

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

arXiv:1907.01590 [hep-ex]

DOI:10.1103/PhysRevD.100.072007

Phys. Rev. D **100**, no. 7, 072007 (2019)

CMS-TOP-17-004, CERN-EP-2019-119 <http://inspirehep.net/record/1742608> 2 citations counted in INSPIRE as of 13 Feb 2020

14. “**Combined search for supersymmetry with photons in proton-proton collisions at $\sqrt{s} = 13$ TeV”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1907.00857 [hep-ex]
DOI:10.1016/j.physletb.2019.135183
Phys. Lett. B **801**, 135183 (2020)
CMS-SUS-18-005, CERN-EP-2019-114 <http://inspirehep.net/record/1742099> 1 citations counted in INSPIRE as of 13 Feb 2020
15. “**Search for pair production of vectorlike quarks in the fully hadronic final state”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1906.11903 [hep-ex]
DOI:10.1103/PhysRevD.100.072001
Phys. Rev. D **100**, no. 7, 072001 (2019)
CMS-B2G-18-005, CERN-EP-2019-129 <http://inspirehep.net/record/1741996> 12 citations counted in INSPIRE as of 13 Feb 2020
16. “**Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at $\sqrt{s} = 13$ TeV”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1906.06441 [hep-ex]
DOI:10.1016/j.physletb.2019.134876
Phys. Lett. B **797**, 134876 (2019)
CMS-EXO-19-001, CERN-EP-2019-113 <http://inspirehep.net/record/1740108> 7 citations counted in INSPIRE as of 13 Feb 2020
17. “**Search for the production of four top quarks in the single-lepton and opposite-sign dilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1906.02805 [hep-ex]
DOI:10.1007/JHEP11(2019)082
JHEP **1911**, 082 (2019)
CERN-EP-2019-098 <http://inspirehep.net/record/1738833> 11 citations counted in INSPIRE as of 13 Feb 2020
18. “**Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1906.00057 [hep-ex]
DOI:10.1016/j.physletb.2019.134952
Phys. Lett. B **798**, 134952 (2019)
CMS-B2G-18-006, CERN-EP-2019-110 <http://inspirehep.net/record/1737724> 6 citations counted in INSPIRE as of 13 Feb 2020
19. “**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”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1905.13059 [hep-ex]
DOI:10.1007/JHEP08(2019)150

JHEP **1908**, 150 (2019)
CMS-SUS-17-007, CERN-EP-2019-093 <http://inspirehep.net/record/1737508> 10 citations counted
in INSPIRE as of 13 Feb 2020

20. “Search for vector-like leptons in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1905.10853 [hep-ex]
DOI:10.1103/PhysRevD.100.052003
Phys. Rev. D **100**, no. 5, 052003 (2019)
CMS-EXO-18-005, CERN-EP-2019-088 <http://inspirehep.net/record/1736896> 5 citations counted
in INSPIRE as of 13 Feb 2020
21. “Search for Higgs and Z boson decays to J/ψ or Υ pairs in proton-proton collisions at $\sqrt{s} = 13$ TeVSearch for Higgs and Z boson decays to J/ψ or Υ pairs in the four-muon final state in proton-proton collisions at $s=13\text{TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1905.10408 [hep-ex]
DOI:10.1016/j.physletb.2019.134811
Phys. Lett. B **797**, 134811 (2019)
CMS-HIG-18-025, CERN-EP-2019-082 <http://inspirehep.net/record/1736895> 3 citations counted
in INSPIRE as of 13 Feb 2020
22. “Search for low-mass quark-antiquark resonances produced in association with a photon at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1905.10331 [hep-ex]
DOI:10.1103/PhysRevLett.123.231803
Phys. Rev. Lett. **123**, no. 23, 231803 (2019)
CMS-EXO-17-027, CERN-EP-2019-068 <http://inspirehep.net/record/1736729> 5 citations counted
in INSPIRE as of 13 Feb 2020
23. “Search for anomalous electroweak production of vector boson pairs in association with two jets in proton-proton collisions at 13 TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1905.07445 [hep-ex]
DOI:10.1016/j.physletb.2019.134985
Phys. Lett. B **798**, 134985 (2019)
CMS-SMP-18-006, CERN-EP-2019-089 <http://inspirehep.net/record/1735737> 11 citations counted
in INSPIRE as of 13 Feb 2020
24. “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 $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1905.07453 [hep-ex]
DOI:10.1103/PhysRevLett.123.131802
Phys. Rev. Lett. **123**, no. 13, 131802 (2019)
CMS-HIG-18-020, CERN-EP-2019-083 <http://inspirehep.net/record/1735729> 3 citations counted
in INSPIRE as of 13 Feb 2020
25. “Search for the production of $W^\pm W^\pm W^\mp$ events at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1905.04246 [hep-ex]
DOI:10.1103/PhysRevD.100.012004
Phys. Rev. D **100**, no. 1, 012004 (2019)
CMS-SMP-17-013, CERN-EP-2019-074 <http://inspirehep.net/record/1734235> 4 citations counted
in INSPIRE as of 13 Feb 2020

26. “**Observation of nuclear modifications in W^\pm boson production in pPb collisions at $\sqrt{s_{NN}} = 8.16 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1905.01486 [hep-ex]
DOI:10.1016/j.physletb.2019.135048
Phys. Lett. B **800**, 135048 (2020)
CMS-HIN-17-007, CERN-EP-2018-283 <http://inspirehep.net/record/1733223> 8 citations counted in INSPIRE as of 13 Feb 2020
27. “**Multiparticle correlation studies in pPb collisions at $\sqrt{s_{NN}} = 8.16 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1904.11519 [hep-ex]
DOI:10.1103/PhysRevC.101.014912
Phys. Rev. C **101**, no. 1, 014912 (2020)
CMS-HIN-17-004, CERN-EP-2019-075 <http://inspirehep.net/record/1731568> 2 citations counted in INSPIRE as of 13 Feb 2020
28. “**Search for resonances decaying to a pair of Higgs bosons in the $b\bar{b}q\bar{q}'\ell\nu$ final state in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1904.04193 [hep-ex]
DOI:10.1007/JHEP10(2019)125
JHEP **1910**, 125 (2019)
CMS-B2G-18-008, CERN-EP-2019-056 <http://inspirehep.net/record/1728701> 4 citations counted in INSPIRE as of 13 Feb 2020
29. “**Extraction and validation of a new set of CMS PYTHIA8 tunes from underlying-event measurements**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1903.12179 [hep-ex]
DOI:10.1140/epjc/s10052-019-7499-4
Eur. Phys. J. C **80**, no. 1, 4 (2020)
CMS-GEN-17-001, CERN-EP-2019-007 <http://inspirehep.net/record/1727345> 43 citations counted in INSPIRE as of 13 Feb 2020
30. “**Search for new physics in top quark production in dilepton final states in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1903.11144 [hep-ex]
DOI:10.1140/epjc/s10052-019-7387-y
Eur. Phys. J. C **79**, no. 11, 886 (2019)
CMS-TOP-17-020, CERN-EP-2019-018 <http://inspirehep.net/record/1726887> 6 citations counted in INSPIRE as of 13 Feb 2020
31. “**Search for a low-mass $\tau^+\tau^-$ resonance in association with a bottom quark in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1903.10228 [hep-ex]
DOI:10.1007/JHEP05(2019)210
JHEP **1905**, 210 (2019)
CMS-HIG-17-014, CERN-EP-2019-035 <http://inspirehep.net/record/1726509> 3 citations counted in INSPIRE as of 13 Feb 2020
32. “**Search for supersymmetry in final states with photons and missing transverse momentum in proton-proton collisions at 13 TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1903.07070 [hep-ex]
DOI:10.1007/JHEP06(2019)143

JHEP **1906**, 143 (2019)
CMS-SUS-17-011, CERN-EP-2019-040 <http://inspirehep.net/record/1725476> 7 citations counted
in INSPIRE as of 13 Feb 2020

33. “**Constraints on anomalous HVV couplings from the production of Higgs bosons decaying to τ lepton pairs**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1903.06973 [hep-ex]
DOI:10.1103/PhysRevD.100.112002
Phys. Rev. D **100**, no. 11, 112002 (2019)
CMS-HIG-17-034, CERN-EP-2019-029 <http://inspirehep.net/record/1725474> 8 citations counted
in INSPIRE as of 13 Feb 2020
34. “**Performance of missing transverse momentum reconstruction in proton-proton collisions at $\sqrt{s} = 13$ TeV using the CMS detector**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1903.06078 [hep-ex]
DOI:10.1088/1748-0221/14/07/P07004
JINST **14**, no. 07, P07004 (2019)
CMS-JME-17-001, CERN-EP-2018-335 <http://inspirehep.net/record/1724943> 42 citations counted
in INSPIRE as of 13 Feb 2020
35. “**Search for charged Higgs bosons in the $H^\pm \rightarrow \tau^\pm \nu_\tau$ decay channel in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1903.04560 [hep-ex]
DOI:10.1007/JHEP07(2019)142
JHEP **1907**, 142 (2019)
CMS-HIG-18-014, CERN-EP-2019-025 <http://inspirehep.net/record/1724676> 19 citations counted
in INSPIRE as of 13 Feb 2020
36. “**Measurement of electroweak production of a W boson in association with two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1903.04040 [hep-ex]
DOI:10.1140/epjc/s10052-019-7585-7
Eur. Phys. J. C **80**, no. 1, 43 (2020)
CMS-SMP-17-011, CERN-EP-2019-022 <http://inspirehep.net/record/1724439> 8 citations counted
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37. “**An embedding technique to determine $\tau\tau$ backgrounds in proton-proton collision data**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1903.01216 [hep-ex]
DOI:10.1088/1748-0221/14/06/P06032
JINST **14**, no. 06, P06032 (2019)
CMS-TAU-18-001, CERN-EP-2019-012 <http://inspirehep.net/record/1723259> 3 citations counted
in INSPIRE as of 13 Feb 2020
38. “**Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1903.00941 [hep-ex]
DOI:10.1140/epjc/s10052-019-7058-z
Eur. Phys. J. C **79**, no. 7, 564 (2019)
CMS-HIG-18-005, CERN-EP-2018-343 <http://inspirehep.net/record/1723254> 13 citations counted
in INSPIRE as of 13 Feb 2020

39. “**Combinations of single-top-quark production cross-section measurements and $|f_{LV}V_{tb}|$ determinations at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS experiments**”
Combinations of single-top-quark production cross-section measurements and $|f_{LV}V_{tb}|$ determinations at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS experiments”
M. Aaboud *et al.* [ATLAS and CMS Collaborations].
arXiv:1902.07158 [hep-ex]
DOI:10.1007/JHEP05(2019)088
JHEP **1905**, 088 (2019)
CERN-EP-2019-005 <http://inspirehep.net/record/1720822> 12 citations counted in INSPIRE as of 13 Feb 2020
40. “**Azimuthal separation in nearly back-to-back jet topologies in inclusive 2- and 3-jet events in pp collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1140/epjc/s10052-019-7276-4
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A. M. Sirunyan *et al.* [CMS Collaboration].
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42. “**Measurement of exclusive $\rho(770)^0$ photoproduction in ultraperipheral pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1902.01339 [hep-ex]
DOI:10.1140/epjc/s10052-019-7202-9
Eur. Phys. J. C **79**, no. 8, 702 (2019)
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43. “**Observation of Two Excited B_c^+ States and Measurement of the $B_c^+(2S)$ Mass in pp Collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1902.00571 [hep-ex]
DOI:10.1103/PhysRevLett.122.132001
Phys. Rev. Lett. **122**, no. 13, 132001 (2019)
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44. “**Search for W boson decays to three charged pions**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1901.11201 [hep-ex]
DOI:10.1103/PhysRevLett.122.151802
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45. “**Charged-particle angular correlations in XeXe collisions at $\sqrt{s_{NN}} = 5.44$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1901.07997 [hep-ex]
DOI:10.1103/PhysRevC.100.044902

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46. “**Search for supersymmetry in events with a photon, jets, b -jets, and missing transverse momentum in proton?proton collisions at 13 TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1901.06726 [hep-ex]
DOI:10.1140/epjc/s10052-019-6926-x
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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1901.04060 [hep-ex]
DOI:10.1016/j.physletb.2019.05.042
Phys. Lett. B **795**, 281 (2019)
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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1901.03428 [hep-ex]
DOI:10.1007/JHEP04(2019)122
JHEP **1904**, 122 (2019)
CMS-SMP-18-002, CERN-EP-2018-322 <http://inspirehep.net/record/1713417> 21 citations counted
in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.10514 [hep-ex]
DOI:10.1016/j.physletb.2019.135042
Phys. Lett. B **800**, 135042 (2020)
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in INSPIRE as of 13 Feb 2020
50. “**Measurements of the Higgs boson width and anomalous HVV couplings from on-shell and off-shell production in the four-lepton final state**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1901.00174 [hep-ex]
DOI:10.1103/PhysRevD.99.112003
Phys. Rev. D **99**, no. 11, 112003 (2019)
CMS-HIG-18-002, CERN-EP-2018-329 <http://inspirehep.net/record/1712708> 41 citations counted
in INSPIRE as of 13 Feb 2020
51. “**Search for dark matter produced in association with a single top quark or a top quark pair in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1901.01553 [hep-ex]
DOI:10.1007/JHEP03(2019)141
JHEP **1903**, 141 (2019)
CMS-EXO-18-010, CERN-EP-2018-311 <http://inspirehep.net/record/1712378> 11 citations counted
in INSPIRE as of 13 Feb 2020

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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1901.01288 [hep-ex]
DOI:10.1007/JHEP03(2019)101
JHEP **1903**, 101 (2019)
CMS-SUS-18-003, CERN-EP-2018-312 <http://inspirehep.net/record/1712372> 8 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.10534 [hep-ex]
DOI:10.1140/epjc/s10052-019-6788-2
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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.10505 [hep-ex]
DOI:10.1140/epjc/s10052-019-6863-8
Eur. Phys. J. C **79**, no. 5, 368 (2019)
CMS-TOP-17-001, CERN-EP-2018-317 <http://inspirehep.net/record/1711626> 40 citations counted in INSPIRE as of 13 Feb 2020
55. “Measurement of the differential Drell-Yan cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.10529 [hep-ex]
DOI:10.1007/JHEP12(2019)059
JHEP **1912**, 059 (2019)
CMS-SMP-17-001, CERN-EP-2018-320 <http://inspirehep.net/record/1711625> 11 citations counted in INSPIRE as of 13 Feb 2020
56. “Search for vector-like quarks in events with two oppositely charged leptons and jets in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.09768 [hep-ex]
DOI:10.1140/epjc/s10052-019-6855-8
Eur. Phys. J. C **79**, no. 4, 364 (2019)
CMS-B2G-17-012, CERN-EP-2018-290 <http://inspirehep.net/record/1711260> 14 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.10443 [hep-ex]
DOI:10.1007/JHEP04(2019)114
JHEP **1904**, 114 (2019)
CMS-EXO-17-025, CERN-EP-2018-326 <http://inspirehep.net/record/1711231> 12 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.06489 [hep-ex]

DOI:10.1140/epjc/s10052-019-6688-5
Eur. Phys. J. C **79**, no. 3, 208 (2019)
CMS-B2G-17-015, CERN-EP-2018-313 <http://inspirehep.net/record/1709333> 9 citations counted
in INSPIRE as of 13 Feb 2020

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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.06504 [hep-ex]
DOI:10.1016/j.physletb.2019.03.059
Phys. Lett. B **792**, 369 (2019)
CMS-HIG-17-028, CERN-EP-2018-304 <http://inspirehep.net/record/1709330> 23 citations counted
in INSPIRE as of 13 Feb 2020
60. “**Inclusive search for supersymmetry in pp collisions at $\sqrt{s} = 13$ TeV using razor variables and boosted object identification in zero and one lepton final states**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.06302 [hep-ex]
DOI:10.1007/JHEP03(2019)031
JHEP **1903**, 031 (2019)
CMS-SUS-16-017, CERN-EP-2018-307 <http://inspirehep.net/record/1709318> 10 citations counted
in INSPIRE as of 13 Feb 2020
61. “**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**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.06359 [hep-ex]
DOI:10.1016/j.physletb.2019.06.021
Phys. Lett. B **795**, 398 (2019)
CMS-HIG-18-011, CERN-EP-2018-309 <http://inspirehep.net/record/1709317> 11 citations counted
in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1103/PhysRevLett.122.132003
Phys. Rev. Lett. **122**, no. 13, 132003 (2019)
CMS-TOP-18-008, CERN-EP-2018-328 <http://inspirehep.net/record/1709180> 15 citations counted
in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.04095 [hep-ex]
DOI:10.1140/epjc/s10052-019-6861-x
Eur. Phys. J. C **79**, no. 5, 391 (2019)
CMS-FSQ-15-006, CERN-EP-2018-308 <http://inspirehep.net/record/1708620> 5 citations counted
in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.04066 [hep-ex]
DOI:10.1007/JHEP01(2019)154
JHEP **1901**, 154 (2019)
CMS-SUS-17-012, CERN-EP-2018-277 <http://inspirehep.net/record/1708516> 7 citations counted
in INSPIRE as of 13 Feb 2020

65. “**Measurement of inclusive very forward jet cross sections in proton-lead collisions at $\sqrt{s_{NN}} = 5.02$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.01691 [hep-ex]
DOI:10.1007/JHEP05(2019)043
JHEP **1905**, 043 (2019)
CMS-FSQ-17-001, CERN-EP-2018-325 <http://inspirehep.net/record/1706995> 5 citations counted in INSPIRE as of 13 Feb 2020
66. “**A search for pair production of new light bosons decaying into muons in proton-proton collisions at 13 TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1812.00380 [hep-ex]
DOI:10.1016/j.physletb.2019.07.013
Phys. Lett. B **796**, 131 (2019)
CMS-HIG-18-003, CERN-EP-2018-288 <http://inspirehep.net/record/1706172> 12 citations counted in INSPIRE as of 13 Feb 2020
67. “**Measurement of associated production of a W boson and a charm quark in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.10021 [hep-ex]
DOI:10.1140/epjc/s10052-019-6752-1
Eur. Phys. J. C **79**, no. 3, 269 (2019)
CMS-SMP-17-014, CERN-EP-2018-282 <http://inspirehep.net/record/1705068> 7 citations counted in INSPIRE as of 13 Feb 2020
68. “**Search for dark matter in events with a leptoquark and missing transverse momentum in proton-proton collisions at 13 TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.10151 [hep-ex]
DOI:10.1016/j.physletb.2019.05.046
Phys. Lett. B **795**, 76 (2019)
CMS-EXO-17-015, CERN-EP-2018-278 <http://inspirehep.net/record/1704960>
69. “**Search for resonant production of second-generation sleptons with same-sign dimuon events in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.09760 [hep-ex]
DOI:10.1140/epjc/s10052-019-6800-x
Eur. Phys. J. C **79**, no. 4, 305 (2019)
CMS-SUS-17-008, CERN-EP-2018-297 <http://inspirehep.net/record/1704953> 3 citations counted in INSPIRE as of 13 Feb 2020
70. “**Search for associated production of a Higgs boson and a single top quark in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.09696 [hep-ex]
DOI:10.1103/PhysRevD.99.092005
Phys. Rev. D **99**, no. 9, 092005 (2019)
CMS-HIG-18-009, CERN-EP-2018-305 <http://inspirehep.net/record/1704945> 9 citations counted in INSPIRE as of 13 Feb 2020
71. “**Combination of searches for Higgs boson pair production in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.09689 [hep-ex]
DOI:10.1103/PhysRevLett.122.121803

Phys. Rev. Lett. **122**, no. 12, 121803 (2019)
CMS-HIG-17-030, CERN-EP-2018-292 <http://inspirehep.net/record/1704939> 46 citations counted
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72. “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 $\sqrt{s} = 8$ and 13 TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.08459 [hep-ex]
DOI:10.1016/j.physletb.2019.03.064
Phys. Lett. B **793**, 320 (2019)
CMS-HIG-17-013, CERN-EP-2018-207 <http://inspirehep.net/record/1704494> 25 citations counted
in INSPIRE as of 13 Feb 2020
73. “Search for long-lived particles decaying into displaced jets in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.07991 [hep-ex]
DOI:10.1103/PhysRevD.99.032011
Phys. Rev. D **99**, no. 3, 032011 (2019)
CMS-EXO-18-007, CERN-EP-2018-289 <http://inspirehep.net/record/1704319> 31 citations counted
in INSPIRE as of 13 Feb 2020
74. “Search for a W? boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.07010 [hep-ex]
DOI:10.1007/JHEP03(2019)127
JHEP **1903**, 127 (2019)
CMS-B2G-18-001, CERN-EP-2018-279 <http://inspirehep.net/record/1704130> 5 citations counted
in INSPIRE as of 13 Feb 2020
75. “Measurements of t̄t differential cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV using events containing two leptons”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.06625 [hep-ex]
DOI:10.1007/JHEP02(2019)149
JHEP **1902**, 149 (2019)
CMS-TOP-17-014, CERN-EP-2018-252 <http://inspirehep.net/record/1703993> 38 citations counted
in INSPIRE as of 13 Feb 2020
76. “Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton?proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.06562 [hep-ex]
DOI:10.1140/epjc/s10052-019-6730-7
Eur. Phys. J. C **79**, no. 3, 280 (2019)
CMS-EXO-16-050, CERN-EP-2018-287 <http://inspirehep.net/record/1703980> 13 citations counted
in INSPIRE as of 13 Feb 2020
77. “Search for excited leptons in $\ell\ell\gamma$ final states in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.03052 [hep-ex]
DOI:10.1007/JHEP04(2019)015
JHEP **1904**, 015 (2019)
CMS-EXO-18-004, CERN-EP-2018-280 <http://inspirehep.net/record/1702433> 7 citations counted
in INSPIRE as of 13 Feb 2020

78. “Search for pair production of first-generation scalar leptoquarks at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.01197 [hep-ex]
DOI:10.1103/PhysRevD.99.052002
Phys. Rev. D **99**, no. 5, 052002 (2019)
CMS-EXO-17-009, CERN-EP-2018-265 <http://inspirehep.net/record/1702163> 13 citations counted in INSPIRE as of 13 Feb 2020
79. “Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two τ leptons and two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.00806 [hep-ex]
DOI:10.1007/JHEP03(2019)170
JHEP **1903**, 170 (2019)
CMS-EXO-17-016, CERN-EP-2018-272 <http://inspirehep.net/record/1701635> 23 citations counted in INSPIRE as of 13 Feb 2020
80. “Event shape variables measured using multijet final states in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1811.00588 [hep-ex]
DOI:10.1007/JHEP12(2018)117
JHEP **1812**, 117 (2018)
CMS-SMP-17-003, CERN-EP-2018-253 <http://inspirehep.net/record/1701612> 6 citations counted in INSPIRE as of 13 Feb 2020
81. “Search for nonresonant Higgs boson pair production in the $b\bar{b}b\bar{b}$ final state at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.11854 [hep-ex]
DOI:10.1007/JHEP04(2019)112
JHEP **1904**, 112 (2019)
CMS-HIG-17-017, CERN-EP-2018-269 <http://inspirehep.net/record/1700771> 13 citations counted in INSPIRE as of 13 Feb 2020
82. “Search for low-mass resonances decaying into bottom quark-antiquark pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.11822 [hep-ex]
DOI:10.1103/PhysRevD.99.012005
Phys. Rev. D **99**, no. 1, 012005 (2019)
CMS-EXO-17-024, CERN-EP-2018-251 <http://inspirehep.net/record/1700756> 16 citations counted in INSPIRE as of 13 Feb 2020
83. “Studies of Beauty Suppression via Nonprompt D^0 Mesons in Pb-Pb Collisions at $Q^2 = 4$ GeV 2 ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.11102 [hep-ex]
DOI:10.1103/PhysRevLett.123.022001
Phys. Rev. Lett. **123**, no. 2, 022001 (2019)
CMS-HIN-16-016, CERN-EP-2018-264 <http://inspirehep.net/record/1700575> 12 citations counted in INSPIRE as of 13 Feb 2020
84. “Search for rare decays of Z and Higgs bosons to J/ψ and a photon in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.10056 [hep-ex]
DOI:10.1140/epjc/s10052-019-6562-5

Eur. Phys. J. C **79**, no. 2, 94 (2019)
CMS-SMP-17-012, CERN-EP-2018-250 <http://inspirehep.net/record/1700175> 7 citations counted
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85. “Search for new particles decaying to a jet and an emerging jet”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.10069 [hep-ex]
DOI:10.1007/JHEP02(2019)179
JHEP **1902**, 179 (2019)
CMS-EXO-18-001, CERN-EP-2018-255 <http://inspirehep.net/record/1700173> 17 citations counted
in INSPIRE as of 13 Feb 2020
86. “Search for pair-produced three-jet resonances in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.10092 [hep-ex]
DOI:10.1103/PhysRevD.99.012010
Phys. Rev. D **99**, no. 1, 012010 (2019)
CMS-EXO-17-030, CERN-EP-2018-247 <http://inspirehep.net/record/1700167> 3 citations counted
in INSPIRE as of 13 Feb 2020
87. “Search for resonant $t\bar{t}$ production in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.05905 [hep-ex]
DOI:10.1007/JHEP04(2019)031
JHEP **1904**, 031 (2019)
CMS-B2G-17-017, CERN-EP-2018-254 <http://inspirehep.net/record/1698822> 29 citations counted
in INSPIRE as of 13 Feb 2020
88. “Centrality and pseudorapidity dependence of the transverse energy density in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.05745 [hep-ex]
DOI:10.1103/PhysRevC.100.024902
Phys. Rev. C **100**, no. 2, 024902 (2019)
CMS-HIN-14-014, CERN-EP-2018-268 <http://inspirehep.net/record/1698385> 1 citations counted
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89. “Evidence for light-by-light scattering and searches for axion-like particles in ultra-peripheral PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.04602 [hep-ex]
DOI:10.1016/j.physletb.2019.134826
Phys. Lett. B **797**, 134826 (2019)
CMS-FSQ-16-012, CERN-EP-2018-271 <http://inspirehep.net/record/1697838> 31 citations counted
in INSPIRE as of 13 Feb 2020
90. “Measurement of B_s^0 meson production in pp and PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.03022 [hep-ex]
DOI:10.1016/j.physletb.2019.07.014
Phys. Lett. B **796**, 168 (2019)
CMS-HIN-17-008, CERN-EP-2018-257 <http://inspirehep.net/record/1697571> 9 citations counted
in INSPIRE as of 13 Feb 2020
91. “Search for top quark partners with charge 5/3 in the same-sign dilepton and single-lepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].

- arXiv:1810.03188 [hep-ex]
DOI:10.1007/JHEP03(2019)082
JHEP **1903**, 082 (2019)
CMS-B2G-17-014, CERN-EP-2018-258 <http://inspirehep.net/record/1697570> 12 citations counted in INSPIRE as of 13 Feb 2020
92. “**Observation of prompt J/ψ meson elliptic flow in high-multiplicity pPb collisions at $\sqrt{s_{NN}} = 8.16 \text{ TeV}$**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.01473 [hep-ex]
DOI:10.1016/j.physletb.2019.02.018
Phys. Lett. B **791**, 172 (2019)
CMS-HIN-18-010, CERN-EP-2018-256 <http://inspirehep.net/record/1696868> 16 citations counted in INSPIRE as of 13 Feb 2020
93. “**Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1810.00196 [hep-ex]
DOI:10.1007/JHEP02(2019)074
JHEP **1902**, 074 (2019)
CMS-EXO-16-053, CERN-EP-2018-248 <http://inspirehep.net/record/1696608> 13 citations counted in INSPIRE as of 13 Feb 2020
94. “**Combined measurements of Higgs boson couplings in proton?proton collisions at $\sqrt{s} = 13 \text{ TeV}$**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1809.10733 [hep-ex]
DOI:10.1140/epjc/s10052-019-6909-y
Eur. Phys. J. C **79**, no. 5, 421 (2019)
CMS-HIG-17-031, CERN-EP-2018-263 <http://inspirehep.net/record/1696607> 168 citations counted in INSPIRE as of 13 Feb 2020
95. “**Measurement of exclusive Υ photoproduction from protons in pPb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1809.11080 [hep-ex]
DOI:10.1140/epjc/s10052-019-6774-8
Eur. Phys. J. C **79**, no. 3, 277 (2019)
CMS-FSQ-13-009, CERN-EP-2018-225 <http://inspirehep.net/record/1696325> 17 citations counted in INSPIRE as of 13 Feb 2020
96. “**Search for single production of vector-like quarks decaying to a top quark and a W boson in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1809.08597 [hep-ex]
DOI:10.1140/epjc/s10052-019-6556-3
Eur. Phys. J. C **79**, 90 (2019)
CMS-B2G-17-018, CERN-EP-2018-230 <http://inspirehep.net/record/1695301> 15 citations counted in INSPIRE as of 13 Feb 2020
97. “**Jet Shapes of Isolated Photon-Tagged Jets in Pb-Pb and pp Collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1809.08602 [hep-ex]
DOI:10.1103/PhysRevLett.122.152001
Phys. Rev. Lett. **122**, no. 15, 152001 (2019)
CMS-HIN-18-006, CERN-EP-2018-249 <http://inspirehep.net/record/1695278> 14 citations counted

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98. "Search for leptoquarks coupled to third-generation quarks in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ "
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1809.05558 [hep-ex]
DOI:10.1103/PhysRevLett.121.241802
Phys. Rev. Lett. **121**, no. 24, 241802 (2018)
CMS-B2G-16-027, CERN-EP-2018-233 <http://inspirehep.net/record/1694381> 16 citations counted
in INSPIRE as of 13 Feb 2020
99. "Search for invisible decays of a Higgs boson produced through vector boson fusion in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ "
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1809.05937 [hep-ex]
DOI:10.1016/j.physletb.2019.04.025
Phys. Lett. B **793**, 520 (2019)
CMS-HIG-17-023, CERN-EP-2018-139 <http://inspirehep.net/record/1694380> 87 citations counted
in INSPIRE as of 13 Feb 2020
100. "Search for the associated production of the Higgs boson and a vector boson in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ via Higgs boson decays to τ leptons"
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1809.03590 [hep-ex]
DOI:10.1007/JHEP06(2019)093
JHEP **1906**, 093 (2019)
CMS-HIG-18-007, CERN-EP-2018-221 <http://inspirehep.net/record/1693616> 11 citations counted
in INSPIRE as of 13 Feb 2020
101. "Studies of $B^{*s2}(5840)^0$ and $B_{s1}(5830)^0$ mesons including the observation of the $B^{*s2}(5840)^0 \rightarrow B^0 K_s^0$ decay in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$ "
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1809.03578 [hep-ex]
DOI:10.1140/epjc/s10052-018-6390-z
Eur. Phys. J. C **78**, no. 11, 939 (2018)
CMS-BPH-16-003, CERN-EP-2018-224 <http://inspirehep.net/record/1693614> 10 citations counted
in INSPIRE as of 13 Feb 2020
102. "Performance of reconstruction and identification of τ leptons decaying to hadrons and ν_τ in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ "
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1809.02816 [hep-ex]
DOI:10.1088/1748-0221/13/10/P10005
JINST **13**, no. 10, P10005 (2018)
CMS-TAU-16-003, CERN-EP-2018-229 <http://inspirehep.net/record/1693412> 58 citations counted
in INSPIRE as of 13 Feb 2020
103. "Search for physics beyond the standard model in high-mass diphoton events from proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ "
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1809.00327 [hep-ex]
DOI:10.1103/PhysRevD.98.092001
Phys. Rev. D **98**, no. 9, 092001 (2018)
CMS-EXO-17-017, CERN-EP-2018-219 <http://inspirehep.net/record/1692559> 19 citations counted
in INSPIRE as of 13 Feb 2020
104. "Charged-particle nuclear modification factors in XeXe collisions at $\sqrt{s_{\text{NN}}} = 5.44 \text{ TeV}$ "
A. M. Sirunyan *et al.* [CMS Collaboration].

arXiv:1809.00201 [hep-ex]
DOI:10.1007/JHEP10(2018)138
JHEP **1810**, 138 (2018)
CMS-HIN-18-004, CERN-EP-2018-228 <http://inspirehep.net/record/1692558> 10 citations counted in INSPIRE as of 13 Feb 2020

105. **“Observation of Higgs boson decay to bottom quarks”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.08242 [hep-ex]
DOI:10.1103/PhysRevLett.121.121801
Phys. Rev. Lett. **121**, no. 12, 121801 (2018)
CMS-HIG-18-016, CERN-EP-2018-223 <http://inspirehep.net/record/1691854> 136 citations counted in INSPIRE as of 13 Feb 2020
106. **“Measurement of jet substructure observables in $t\bar{t}$ events from proton-proton collisions at $\sqrt{s} = 13\text{TeV}$ ”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.07340 [hep-ex]
DOI:10.1103/PhysRevD.98.092014
Phys. Rev. D **98**, no. 9, 092014 (2018)
CMS-TOP-17-013, CERN-EP-2018-214 <http://inspirehep.net/record/1690148> 15 citations counted in INSPIRE as of 13 Feb 2020
107. **“Search for a charged Higgs boson decaying to charm and bottom quarks in proton-proton collisions at $\sqrt{s} = 8\text{ TeV}$ ”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.06575 [hep-ex]
DOI:10.1007/JHEP11(2018)115
JHEP **1811**, 115 (2018)
CMS-HIG-16-030, CERN-EP-2018-121 <http://inspirehep.net/record/1688938> 22 citations counted in INSPIRE as of 13 Feb 2020
108. **“Search for pair production of second-generation leptoquarks at $\sqrt{s} = 13\text{ TeV}$ ”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.05082 [hep-ex]
DOI:10.1103/PhysRevD.99.032014
Phys. Rev. D **99**, no. 3, 032014 (2019)
CMS-EXO-17-003, CERN-EP-2018-218 <http://inspirehep.net/record/1687544> 18 citations counted in INSPIRE as of 13 Feb 2020
109. **“Search for an $L_\mu - L_\tau$ gauge boson using $Z \rightarrow 4\mu$ events in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$ ”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.03684 [hep-ex]
DOI:10.1016/j.physletb.2019.01.072
Phys. Lett. B **792**, 345 (2019)
CMS-EXO-18-008, CERN-EP-2018-208 <http://inspirehep.net/record/1686833> 27 citations counted in INSPIRE as of 13 Feb 2020
110. **“Evidence for the associated production of a single top quark and a photon in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$ ”**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.02913 [hep-ex]
DOI:10.1103/PhysRevLett.121.221802
Phys. Rev. Lett. **121**, no. 22, 221802 (2018)
CMS-TOP-17-016, CERN-EP-2018-206 <http://inspirehep.net/record/1686000> 17 citations counted in INSPIRE as of 13 Feb 2020

111. “Search for long-lived particles with displaced vertices in multijet events in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.03078 [hep-ex]
DOI:10.1103/PhysRevD.98.092011
Phys. Rev. D **98**, no. 9, 092011 (2018)
CMS-EXO-17-018, CERN-EP-2018-203 <http://inspirehep.net/record/1685992> 31 citations counted in INSPIRE as of 13 Feb 2020
112. “Search for pair-produced resonances decaying to quark pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.03124 [hep-ex]
DOI:10.1103/PhysRevD.98.112014
Phys. Rev. D **98**, no. 11, 112014 (2018)
CMS-EXO-17-021, CERN-EP-2018-211 <http://inspirehep.net/record/1685989> 19 citations counted in INSPIRE as of 13 Feb 2020
113. “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”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.01365 [hep-ex]
DOI:10.1007/JHEP01(2019)051
JHEP **1901**, 051 (2019)
CMS-B2G-17-006, CERN-EP-2018-182 <http://inspirehep.net/record/1685235> 11 citations counted in INSPIRE as of 13 Feb 2020
114. “Search for production of Higgs boson pairs in the four b quark final state using large-area jets in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.01473 [hep-ex]
DOI:10.1007/JHEP01(2019)040
JHEP **1901**, 040 (2019)
CMS-B2G-17-019, CERN-EP-2018-195 <http://inspirehep.net/record/1685232> 21 citations counted in INSPIRE as of 13 Feb 2020
115. “Search for resonances in the mass spectrum of muon pairs produced in association with b quark jets in proton-proton collisions at $\sqrt{s} = 8$ and 13 TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.01890 [hep-ex]
DOI:10.1007/JHEP11(2018)161
JHEP **1811**, 161 (2018)
CMS-HIG-16-017, CERN-EP-2018-204 <http://inspirehep.net/record/1685201> 20 citations counted in INSPIRE as of 13 Feb 2020
116. “Search for narrow $H\gamma$ resonances in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1808.01257 [hep-ex]
DOI:10.1103/PhysRevLett.122.081804
Phys. Rev. Lett. **122**, no. 8, 081804 (2019)
CMS-EXO-17-019, CERN-EP-2018-200 <http://inspirehep.net/record/1685054> 2 citations counted in INSPIRE as of 13 Feb 2020
117. “Search for a W' boson decaying to a τ lepton and a neutrino in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1807.11421 [hep-ex]
DOI:10.1016/j.physletb.2019.01.069

Phys. Lett. B **792**, 107 (2019)
CMS-EXO-17-008, CERN-EP-2018-202 <http://inspirehep.net/record/1684340> 27 citations counted
in INSPIRE as of 13 Feb 2020

118. “**Searches for pair production of charginos and top squarks in final states with two oppositely charged leptons in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1807.07799 [hep-ex]
DOI:10.1007/JHEP11(2018)079
JHEP **1811**, 079 (2018)
CMS-SUS-17-010, CERN-EP-2018-186 <http://inspirehep.net/record/1683312> 22 citations counted
in INSPIRE as of 13 Feb 2020
119. “**Search for dark matter particles produced in association with a top quark pair at $\sqrt{s} = 13 \text{ TeV}$**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1807.06522 [hep-ex]
DOI:10.1103/PhysRevLett.122.011803
Phys. Rev. Lett. **122**, no. 1, 011803 (2019)
CMS-EXO-16-049, CERN-EP-2018-183 <http://inspirehep.net/record/1682779> 20 citations counted
in INSPIRE as of 13 Feb 2020
120. “**Search for the Higgs boson decaying to two muons in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1807.06325 [hep-ex]
DOI:10.1103/PhysRevLett.122.021801
Phys. Rev. Lett. **122**, no. 2, 021801 (2019)
CMS-HIG-17-019, CERN-EP-2018-165 <http://inspirehep.net/record/1682776> 43 citations counted
in INSPIRE as of 13 Feb 2020
121. “**Measurements of the differential jet cross section as a function of the jet mass in dijet events from proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1807.05974 [hep-ex]
DOI:10.1007/JHEP11(2018)113
JHEP **1811**, 113 (2018)
CMS-SMP-16-010, CERN-EP-2018-180 <http://inspirehep.net/record/1682495> 23 citations counted
in INSPIRE as of 13 Feb 2020
122. “**Precision measurement of the structure of the CMS inner tracking system using nuclear interactions**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1807.03289 [physics.ins-det]
DOI:10.1088/1748-0221/13/10/P10034
JINST **13**, no. 10, P10034 (2018)
CMS-TRK-17-001, CERN-EP-2018-144 <http://inspirehep.net/record/1682069> 6 citations counted
in INSPIRE as of 13 Feb 2020
123. “**Measurement of inclusive and differential Higgs boson production cross sections in the diphoton decay channel in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$**
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1807.03825 [hep-ex]
DOI:10.1007/JHEP01(2019)183
JHEP **1901**, 183 (2019)
CMS-HIG-17-025, CERN-EP-2018-166 <http://inspirehep.net/record/1681748> 25 citations counted
in INSPIRE as of 13 Feb 2020

124. “Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos and b quarks at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1807.02826 [hep-ex]
DOI:10.1007/JHEP11(2018)172
JHEP **1811**, 172 (2018)
CMS-B2G-17-004, CERN-EP-2018-169 <http://inspirehep.net/record/1681436> 19 citations counted in INSPIRE as of 13 Feb 2020
125. “Study of the underlying event in top quark pair production in pp collisions at 13 TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1807.02810 [hep-ex]
DOI:10.1140/epjc/s10052-019-6620-z
Eur. Phys. J. C **79**, no. 2, 123 (2019)
CMS-TOP-17-015, CERN-EP-2018-177 <http://inspirehep.net/record/1681435> 15 citations counted in INSPIRE as of 13 Feb 2020
126. “Search for supersymmetry in events with a τ lepton pair and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1807.02048 [hep-ex]
DOI:10.1007/JHEP11(2018)151
JHEP **1811**, 151 (2018)
CMS-SUS-17-003, CERN-EP-2018-149 <http://inspirehep.net/record/1681016> 31 citations counted in INSPIRE as of 13 Feb 2020
127. “Measurement of differential cross sections for inclusive isolated-photon and photon+jets production in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1807.00782 [hep-ex]
DOI:10.1140/epjc/s10052-018-6482-9
Eur. Phys. J. C **79**, no. 1, 20 (2019)
CMS-SMP-16-003, CERN-EP-2018-167 <http://inspirehep.net/record/1680459> 16 citations counted in INSPIRE as of 13 Feb 2020
128. “Measurement of charged particle spectra in minimum-bias events from proton?proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.11245 [hep-ex]
DOI:10.1140/epjc/s10052-018-6144-y
Eur. Phys. J. C **78**, no. 9, 697 (2018)
CMS-FSQ-16-011, CERN-EP-2018-187 <http://inspirehep.net/record/1680318> 9 citations counted in INSPIRE as of 13 Feb 2020
129. “Measurement of differential cross sections for Z boson pair production in association with jets at $\sqrt{s} = 8$ and 13 TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.11073 [hep-ex]
DOI:10.1016/j.physletb.2018.11.007
Phys. Lett. B **789**, 19 (2019)
CMS-SMP-17-005, CERN-EP-2018-161 <http://inspirehep.net/record/1680022> 11 citations counted in INSPIRE as of 13 Feb 2020
130. “Search for heavy Majorana neutrinos in same-sign dilepton channels in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.10905 [hep-ex]

DOI:10.1007/JHEP01(2019)122
JHEP **1901**, 122 (2019)
CMS-EXO-17-028, CERN-EP-2018-159 <http://inspirehep.net/record/1680021> 26 citations counted
in INSPIRE as of 13 Feb 2020

131. “Search for the decay of a Higgs boson in the $\ell\ell\gamma$ channel in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.05996 [hep-ex]
DOI:10.1007/JHEP11(2018)152
JHEP **1811**, 152 (2018)
CMS-HIG-17-007, CERN-EP-2018-092 <http://inspirehep.net/record/1678088> 23 citations counted
in INSPIRE as of 13 Feb 2020
132. “Search for supersymmetric partners of electrons and muons in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.05264 [hep-ex]
DOI:10.1016/j.physletb.2019.01.005
Phys. Lett. B **790**, 140 (2019)
CMS-SUS-17-009, CERN-EP-2018-132 <http://inspirehep.net/record/1677905> 29 citations counted
in INSPIRE as of 13 Feb 2020
133. “Measurements of properties of the Higgs boson decaying to a W boson pair in pp collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.05246 [hep-ex]
DOI:10.1016/j.physletb.2018.12.073
Phys. Lett. B **791**, 96 (2019)
CMS-HIG-16-042, CERN-EP-2018-141 <http://inspirehep.net/record/1677887> 57 citations counted
in INSPIRE as of 13 Feb 2020
134. “Search for dark matter produced in association with a Higgs boson decaying to $\gamma\gamma$ or $\tau^+\tau^-$ at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.04771 [hep-ex]
DOI:10.1007/JHEP09(2018)046
JHEP **1809**, 046 (2018)
CMS-EXO-16-055, CERN-EP-2018-129 <http://inspirehep.net/record/1677677> 21 citations counted
in INSPIRE as of 13 Feb 2020
135. “Observation of the $Z \rightarrow \psi\ell^+\ell^-$ decay in pp collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.04213 [hep-ex]
DOI:10.1103/PhysRevLett.121.141801
Phys. Rev. Lett. **121**, no. 14, 141801 (2018)
CMS-BPH-16-001, CERN-EP-2018-131 <http://inspirehep.net/record/1677496> 4 citations counted
in INSPIRE as of 13 Feb 2020
136. “Search for resonant pair production of Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at 13 TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.03548 [hep-ex]
DOI:10.1007/JHEP08(2018)152
JHEP **1808**, 152 (2018)
CMS-HIG-17-009, CERN-EP-2018-127 <http://inspirehep.net/record/1677276> 21 citations counted
in INSPIRE as of 13 Feb 2020

137. “Search for a singly produced third-generation scalar leptoquark decaying to a τ lepton and a bottom quark in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.03472 [hep-ex]
DOI:10.1007/JHEP07(2018)115
JHEP **1807**, 115 (2018)
CMS-EXO-17-029, CERN-EP-2018-136 <http://inspirehep.net/record/1677275> 26 citations counted in INSPIRE as of 13 Feb 2020
138. “Search for pair-produced resonances each decaying into at least four quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.01058 [hep-ex]
DOI:10.1103/PhysRevLett.121.141802
Phys. Rev. Lett. **121**, no. 14, 141802 (2018)
CMS-EXO-17-022, CERN-EP-2018-094 <http://inspirehep.net/record/1676219> 1 citations counted in INSPIRE as of 13 Feb 2020
139. “Measurement of the weak mixing angle using the forward-backward asymmetry of Drell-Yan events in pp collisions at 8 TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.00863 [hep-ex]
DOI:10.1140/epjc/s10052-018-6148-7
Eur. Phys. J. C **78**, no. 9, 701 (2018)
CMS-SMP-16-007, CERN-EP-2018-126 <http://inspirehep.net/record/1676216> 23 citations counted in INSPIRE as of 13 Feb 2020
140. “Search for narrow and broad dijet resonances in proton-proton collisions at $\sqrt{s} = 13$ TeV and constraints on dark matter mediators and other new particles”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.00843 [hep-ex]
DOI:10.1007/JHEP08(2018)130
JHEP **1808**, 130 (2018)
CMS-EXO-16-056, CERN-EP-2018-123 <http://inspirehep.net/record/1676214> 91 citations counted in INSPIRE as of 13 Feb 2020
141. “Angular analysis of the decay $B^+ \rightarrow K^+ \mu^+ \mu^-$ in proton-proton collisions at $\sqrt{s} = 8$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.00636 [hep-ex]
DOI:10.1103/PhysRevD.98.112011
Phys. Rev. D **98**, no. 11, 112011 (2018)
CMS-BPH-15-001, CERN-EP-2018-125 <http://inspirehep.net/record/1676212> 15 citations counted in INSPIRE as of 13 Feb 2020
142. “Search for Higgs boson pair production in the $\gamma\gamma b\bar{b}$ final state in pp collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1806.00408 [hep-ex]
DOI:10.1016/j.physletb.2018.10.056
Phys. Lett. B **788**, 7 (2019)
CMS-HIG-17-008, CERN-EP-2017-343 <http://inspirehep.net/record/1676092> 51 citations counted in INSPIRE as of 13 Feb 2020
143. “Search for beyond the standard model Higgs bosons decaying into a $b\bar{b}$ pair in pp collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.12191 [hep-ex]

DOI:10.1007/JHEP08(2018)113
JHEP **1808**, 113 (2018)
CMS-HIG-16-018, CERN-EP-2018-124 <http://inspirehep.net/record/1675818> 35 citations counted
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144. “**Observation of the $\chi_{b1}(3P)$ and $\chi_{b2}(3P)$ and measurement of their masses**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.11192 [hep-ex]
DOI:10.1103/PhysRevLett.121.092002
Phys. Rev. Lett. **121**, 092002 (2018)
CMS-BPH-17-008, CERN-EP-2018-134 <http://inspirehep.net/record/1675256> 18 citations counted
in INSPIRE as of 13 Feb 2020
145. “**Constraints on models of scalar and vector leptoquarks decaying to a quark and a neutrino at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.10228 [hep-ex]
DOI:10.1103/PhysRevD.98.032005
Phys. Rev. D **98**, no. 3, 032005 (2018)
CMS-SUS-18-001, CERN-EP-2018-109 <http://inspirehep.net/record/1674927> 38 citations counted
in INSPIRE as of 13 Feb 2020
146. “**Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state with two b quarks and two τ leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.10191 [hep-ex]
DOI:10.1016/j.physletb.2018.08.057
Phys. Lett. B **785**, 462 (2018)
CMS-HIG-17-024, CERN-EP-2018-089 <http://inspirehep.net/record/1674926> 29 citations counted
in INSPIRE as of 13 Feb 2020
147. “**Measurement of nuclear modification factors of $\Upsilon(1S)$, $\Upsilon(2S)$, and $\Upsilon(3S)$ mesons in PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.09215 [hep-ex]
DOI:10.1016/j.physletb.2019.01.006
Phys. Lett. B **790**, 270 (2019)
CMS-HIN-16-023, CERN-EP-2018-110 <http://inspirehep.net/record/1674529> 50 citations counted
in INSPIRE as of 13 Feb 2020
148. “**Measurement of the production cross section for single top quarks in association with W bosons in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.07399 [hep-ex]
DOI:10.1007/JHEP10(2018)117
JHEP **1810**, 117 (2018)
CMS-TOP-17-018, CERN-EP-2018-074 <http://inspirehep.net/record/1674077> 36 citations counted
in INSPIRE as of 13 Feb 2020
149. “**Search for black holes and sphalerons in high-multiplicity final states in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.06013 [hep-ex]
DOI:10.1007/JHEP11(2018)042
JHEP **1811**, 042 (2018)
CMS-EXO-17-023, CERN-EP-2018-093 <http://inspirehep.net/record/1673362> 21 citations counted
in INSPIRE as of 13 Feb 2020

150. “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”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.05784 [hep-ex]
DOI:10.1007/JHEP09(2018)065
JHEP **1809**, 065 (2018)
CMS-SUS-17-005, CERN-EP-2018-079 <http://inspirehep.net/record/1673197> 16 citations counted in INSPIRE as of 13 Feb 2020
151. “Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state of two muons and two τ leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.04865 [hep-ex]
DOI:10.1007/JHEP11(2018)018
JHEP **1811**, 018 (2018)
CMS-HIG-17-029, CERN-EP-2018-078 <http://inspirehep.net/record/1673011> 31 citations counted in INSPIRE as of 13 Feb 2020
152. “Search for vector-like T and B quark pairs in final states with leptons at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.04758 [hep-ex]
DOI:10.1007/JHEP08(2018)177
JHEP **1808**, 177 (2018)
CMS-B2G-17-011, CERN-EP-2018-069 <http://inspirehep.net/record/1672970> 56 citations counted in INSPIRE as of 13 Feb 2020
153. “Measurement of the groomed jet mass in PbPb and pp collisions at $\sqrt{s_{\text{NN}}} = 5.02$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.05145 [hep-ex]
DOI:10.1007/JHEP10(2018)161
JHEP **1810**, 161 (2018)
CMS-HIN-16-024, CERN-EP-2018-097 <http://inspirehep.net/record/1672962> 27 citations counted in INSPIRE as of 13 Feb 2020
154. “Constraining gluon distributions in nuclei using dijets in proton-proton and proton-lead collisions at $\sqrt{s_{\text{NN}}} = 5.02$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.04736 [hep-ex]
DOI:10.1103/PhysRevLett.121.062002
Phys. Rev. Lett. **121**, no. 6, 062002 (2018)
CMS-HIN-16-003, CERN-EP-2018-091 <http://inspirehep.net/record/1672941> 18 citations counted in INSPIRE as of 13 Feb 2020
155. “Measurement of prompt $\psi(2S)$ production cross sections in proton-lead and proton-proton collisions at $\sqrt{s_{\text{NN}}} = 5.02$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1805.02248 [hep-ex]
DOI:10.1016/j.physletb.2019.01.058
Phys. Lett. B **790**, 509 (2019)
CMS-HIN-16-015, CERN-EP-2018-056 <http://inspirehep.net/record/1672011> 14 citations counted in INSPIRE as of 13 Feb 2020
156. “Measurement of the top quark mass with lepton+jets final states using p p collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].

arXiv:1805.01428 [hep-ex]
DOI:10.1140/epjc/s10052-018-6332-9
Eur. Phys. J. C **78**, no. 11, 891 (2018)
CMS-TOP-17-007, CERN-EP-2018-063 <http://inspirehep.net/record/1671499> 33 citations counted in INSPIRE as of 13 Feb 2020

157. “Elliptic flow of charm and strange hadrons in high-multiplicity pPb collisions at $\sqrt{s_{\text{NN}}} = 8.16 \text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1804.09767 [hep-ex]
DOI:10.1103/PhysRevLett.121.082301
Phys. Rev. Lett. **121**, no. 8, 082301 (2018)
CMS-HIN-17-003, CERN-EP-2018-076 <http://inspirehep.net/record/1670168> 45 citations counted in INSPIRE as of 13 Feb 2020
158. “Search for disappearing tracks as a signature of new long-lived particles in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1804.07321 [hep-ex]
DOI:10.1007/JHEP08(2018)016
JHEP **1808**, 016 (2018)
CMS-EXO-16-044, CERN-EP-2018-061 <http://inspirehep.net/record/1669245> 42 citations counted in INSPIRE as of 13 Feb 2020
159. “Measurement of differential cross sections for Z boson production in association with jets in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1804.05252 [hep-ex]
DOI:10.1140/epjc/s10052-018-6373-0
Eur. Phys. J. C **78**, no. 11, 965 (2018)
CMS-SMP-16-015, CERN-EP-2018-071 <http://inspirehep.net/record/1667854> 25 citations counted in INSPIRE as of 13 Feb 2020
160. “Performance of the CMS muon detector and muon reconstruction with proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1804.04528 [physics.ins-det]
DOI:10.1088/1748-0221/13/06/P06015
JINST **13**, no. 06, P06015 (2018)
CMS-MUO-16-001, CERN-EP-2018-058 <http://inspirehep.net/record/1667449> 199 citations counted in INSPIRE as of 13 Feb 2020
161. “Search for ttH production in the H $\rightarrow b\bar{b}$ decay channel with leptonic tt decays in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1804.03682 [hep-ex]
DOI:10.1007/JHEP03(2019)026
JHEP **1903**, 026 (2019)
CMS-HIG-17-026, CERN-EP-2018-065 <http://inspirehep.net/record/1667189> 51 citations counted in INSPIRE as of 13 Feb 2020
162. “Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1804.02716 [hep-ex]
DOI:10.1007/JHEP11(2018)185
JHEP **1811**, 185 (2018)
CMS-HIG-16-040, CERN-EP-2018-060 <http://inspirehep.net/record/1666825> 110 citations counted in INSPIRE as of 13 Feb 2020

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163. “**Observation of $t\bar{t}H$ production**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1804.02610 [hep-ex]
DOI:10.1103/PhysRevLett.120.231801
Phys. Rev. Lett. **120**, no. 23, 231801 (2018)
CMS-HIG-17-035, CERN-EP-2018-064 <http://inspirehep.net/record/1666824> 204 citations counted
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164. “**Search for a new scalar resonance decaying to a pair of Z bosons in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1804.01939 [hep-ex]
DOI:10.1007/JHEP06(2018)127, 10.1007/JHEP03(2019)128
JHEP **1806**, 127 (2018), Erratum: [JHEP **1903**, 128 (2019)]
CMS-HIG-17-012, CERN-EP-2018-009 <http://inspirehep.net/record/1666019> 53 citations counted
in INSPIRE as of 13 Feb 2020
165. “**Search for high-mass resonances in final states with a lepton and missing transverse momentum at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1803.11133 [hep-ex]
DOI:10.1007/JHEP06(2018)128
JHEP **1806**, 128 (2018)
CMS-EXO-16-033, CERN-EP-2018-020 <http://inspirehep.net/record/1665228> 24 citations counted
in INSPIRE as of 13 Feb 2020
166. “**Search for a heavy right-handed W boson and a heavy neutrino in events with two same-flavor leptons and two jets at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1803.11116 [hep-ex]
DOI:10.1007/JHEP05(2018)148
JHEP **1805**, no. 05, 148 (2018)
CMS-EXO-17-011, CERN-EP-2018-028 <http://inspirehep.net/record/1665226> 34 citations counted
in INSPIRE as of 13 Feb 2020
167. “**Search for a heavy resonance decaying into a Z boson and a Z or W boson in $2\tau 2q$ final states at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1803.10093 [hep-ex]
DOI:10.1007/JHEP09(2018)101
JHEP **1809**, 101 (2018)
CMS-B2G-17-013, CERN-EP-2018-037 <http://inspirehep.net/record/1664330> 24 citations counted
in INSPIRE as of 13 Feb 2020
168. “**Measurement of differential cross sections for the production of top quark pairs and of additional jets in lepton+jets events from pp collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1803.08856 [hep-ex]
DOI:10.1103/PhysRevD.97.112003
Phys. Rev. D **97**, no. 11, 112003 (2018)
CMS-TOP-17-002, CERN-EP-2018-039 <http://inspirehep.net/record/1663958> 46 citations counted
in INSPIRE as of 13 Feb 2020
169. “**Search for new physics in dijet angular distributions using proton?proton collisions at $\sqrt{s} = 13$ TeV and constraints on dark matter and other models**”
A. M. Sirunyan *et al.* [CMS Collaboration].

- arXiv:1803.08030 [hep-ex]
DOI:10.1140/epjc/s10052-018-6242-x
Eur. Phys. J. C **78**, no. 9, 789 (2018)
CMS-EXO-16-046, CERN-EP-2018-036 <http://inspirehep.net/record/1663452> 35 citations counted in INSPIRE as of 13 Feb 2020
170. “Search for $t\bar{t}H$ production in the all-jet final state in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1803.06986 [hep-ex]
DOI:10.1007/JHEP06(2018)101
JHEP **1806**, 101 (2018)
CMS-HIG-17-022, CERN-EP-2018-038 <http://inspirehep.net/record/1663385> 35 citations counted in INSPIRE as of 13 Feb 2020
171. “Search for additional neutral MSSM Higgs bosons in the $\tau\tau$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1803.06553 [hep-ex]
DOI:10.1007/JHEP09(2018)007
JHEP **1809**, 007 (2018)
CMS-HIG-17-020, CERN-EP-2018-026 <http://inspirehep.net/record/1663234> 89 citations counted in INSPIRE as of 13 Feb 2020
172. “Search for high-mass resonances in dilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1803.06292 [hep-ex]
DOI:10.1007/JHEP06(2018)120
JHEP **1806**, 120 (2018)
CMS-EXO-16-047, CERN-EP-2018-027 <http://inspirehep.net/record/1662926> 129 citations counted in INSPIRE as of 13 Feb 2020
173. “Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying τ leptons at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1803.05485 [hep-ex]
DOI:10.1007/JHEP08(2018)066
JHEP **1808**, 066 (2018)
CMS-HIG-17-018, CERN-EP-2018-017 <http://inspirehep.net/record/1662661> 52 citations counted in INSPIRE as of 13 Feb 2020
174. “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”
A. M. Sirunyan *et al.* [CMS and TOTEM Collaborations].
arXiv:1803.04496 [hep-ex]
DOI:10.1007/JHEP07(2018)153
JHEP **1807**, 153 (2018)
CMS-PPS-17-001, TOTEM 2018-001, CERN-EP-2018-014 <http://inspirehep.net/record/1662293> 28 citations counted in INSPIRE as of 13 Feb 2020
175. “Search for a heavy resonance decaying into a Z boson and a vector boson in the $\nu\bar{\nu}q\bar{q}$ final state”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1803.03838 [hep-ex]
DOI:10.1007/JHEP07(2018)075
JHEP **1807**, 075 (2018)

CMS-B2G-17-005, CERN-EP-2018-023 <http://inspirehep.net/record/1662083> 22 citations counted in INSPIRE as of 13 Feb 2020

176. “**Measurements of differential cross sections of top quark pair production as a function of kinematic event variables in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1803.03991 [hep-ex]
DOI:10.1007/JHEP06(2018)002
JHEP **1806**, 002 (2018)
CMS-TOP-16-014, CERN-EP-2018-013 <http://inspirehep.net/record/1662081> 17 citations counted in INSPIRE as of 13 Feb 2020
177. “**Jet properties in PbPb and pp collisions at $\sqrt{s_{\text{NN}}} = 5.02 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1803.00042 [nucl-ex]
DOI:10.1007/JHEP05(2018)006
JHEP **1805**, 006 (2018)
CMS-HIN-16-020, CERN-EP-2018-011 <http://inspirehep.net/record/1658057> 26 citations counted in INSPIRE as of 13 Feb 2020
178. “**Search for a heavy resonance decaying to a pair of vector bosons in the lepton plus merged jet final state at $\sqrt{s} = 13 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1802.09407 [hep-ex]
DOI:10.1007/JHEP05(2018)088
JHEP **1805**, 088 (2018)
CMS-B2G-16-029, CERN-EP-2018-015 <http://inspirehep.net/record/1657397> 29 citations counted in INSPIRE as of 13 Feb 2020
179. “**Search for narrow resonances in the b-tagged dijet mass spectrum in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1802.06149 [hep-ex]
DOI:10.1103/PhysRevLett.120.201801
Phys. Rev. Lett. **120**, no. 20, 201801 (2018)
CMS-EXO-16-057, CERN-EP-2018-007 <http://inspirehep.net/record/1655968> 20 citations counted in INSPIRE as of 13 Feb 2020
180. “**Measurement of the Λ_b polarization and angular parameters in $\Lambda_b \rightarrow J/\psi \Lambda$ decays from pp collisions at $\sqrt{s} = 7$ and 8 TeV** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1802.04867 [hep-ex]
DOI:10.1103/PhysRevD.97.072010
Phys. Rev. D **97**, no. 7, 072010 (2018)
CMS-BPH-15-002, CERN-EP-2017-331 <http://inspirehep.net/record/1654926> 15 citations counted in INSPIRE as of 13 Feb 2020
181. “**Search for heavy neutral leptons in events with three charged leptons in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1802.02965 [hep-ex]
DOI:10.1103/PhysRevLett.120.221801
Phys. Rev. Lett. **120**, no. 22, 221801 (2018)
CMS-EXO-17-012, CERN-EP-2018-006 <http://inspirehep.net/record/1653954> 85 citations counted in INSPIRE as of 13 Feb 2020
182. “**Measurement of the inelastic proton-proton cross section at $\sqrt{s} = 13 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].

- arXiv:1802.02613 [hep-ex]
DOI:10.1007/JHEP07(2018)161
JHEP **1807**, 161 (2018)
CMS-FSQ-15-005, CERN-EP-2018-004 <http://inspirehep.net/record/1653948> 98 citations counted in INSPIRE as of 13 Feb 2020
183. “Search for natural and split supersymmetry in proton-proton collisions at $\sqrt{s} = 13$ TeV in final states with jets and missing transverse momentum”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1802.02110 [hep-ex]
DOI:10.1007/JHEP05(2018)025
JHEP **1805**, 025 (2018)
CMS-SUS-16-038, CERN-EP-2018-003 <http://inspirehep.net/record/1653451> 72 citations counted in INSPIRE as of 13 Feb 2020
184. “Search for single production of vector-like quarks decaying to a b quark and a Higgs boson”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1802.01486 [hep-ex]
DOI:10.1007/JHEP06(2018)031
JHEP **1806**, 031 (2018)
CMS-B2G-17-009, CERN-EP-2017-338 <http://inspirehep.net/record/1653127> 21 citations counted in INSPIRE as of 13 Feb 2020
185. “Search for lepton-flavor violating decays of heavy resonances and quantum black holes to e $^{\pm}$ final states in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1802.01122 [hep-ex]
DOI:10.1007/JHEP04(2018)073
JHEP **1804**, 073 (2018)
CMS-EXO-16-058, CERN-EP-2018-001 <http://inspirehep.net/record/1653123> 12 citations counted in INSPIRE as of 13 Feb 2020
186. “Comparing transverse momentum balance of b jet pairs in pp and PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1802.00707 [hep-ex]
DOI:10.1007/JHEP03(2018)181
JHEP **1803**, 181 (2018)
CMS-HIN-16-005, CERN-EP-2018-005 <http://inspirehep.net/record/1652833> 17 citations counted in INSPIRE as of 13 Feb 2020
187. “Search for dark matter in events with energetic, hadronically decaying top quarks and missing transverse momentum at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1801.08427 [hep-ex]
DOI:10.1007/JHEP06(2018)027
JHEP **1806**, 027 (2018)
CMS-EXO-16-051, CERN-EP-2017-299 <http://inspirehep.net/record/1650462> 39 citations counted in INSPIRE as of 13 Feb 2020
188. “Observation of Medium-Induced Modifications of Jet Fragmentation in Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV Using Isolated Photon-Tagged Jets”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1801.04895 [hep-ex]
DOI:10.1103/PhysRevLett.121.242301
Phys. Rev. Lett. **121**, no. 24, 242301 (2018)
CMS-HIN-16-014, CERN-EP-2017-337 <http://inspirehep.net/record/1648162> 25 citations counted

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189. “**Combined search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1801.03957 [hep-ex]
DOI:10.1007/JHEP03(2018)160
JHEP **1803**, 160 (2018)
CMS-SUS-17-004, CERN-EP-2017-283 <http://inspirehep.net/record/1647947> 83 citations counted in INSPIRE as of 13 Feb 2020
190. “**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**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1801.03535 [hep-ex]
DOI:10.1140/epjc/s10052-018-6146-9
Eur. Phys. J. C **78**, no. 9, 708 (2018)
CMS-HIG-15-007, CERN-EP-2017-307 <http://inspirehep.net/record/1647562> 14 citations counted in INSPIRE as of 13 Feb 2020
191. “**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**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1801.01846 [hep-ex]
DOI:10.1016/j.physletb.2018.05.062
Phys. Lett. B **782**, 440 (2018)
CERN-EP-2017-336, CMS-SUS-16-048 <http://inspirehep.net/record/1646260> 68 citations counted in INSPIRE as of 13 Feb 2020
192. “**Search for decays of stopped exotic long-lived particles produced in proton-proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1801.00359 [hep-ex]
DOI:10.1007/JHEP05(2018)127
JHEP **1805**, 127 (2018)
CMS-EXO-16-004, CERN-EP-2017-330 <http://inspirehep.net/record/1645630> 34 citations counted in INSPIRE as of 13 Feb 2020
193. “**Electroweak production of two jets in association with a Z boson in proton?proton collisions at $\sqrt{s} = 13$ TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1712.09814 [hep-ex]
DOI:10.1140/epjc/s10052-018-6049-9
Eur. Phys. J. C **78**, no. 7, 589 (2018)
CMS-SMP-16-018, CERN-EP-2017-328 <http://inspirehep.net/record/1645246> 17 citations counted in INSPIRE as of 13 Feb 2020
194. “**Measurement of prompt and nonprompt charmonium suppression in $PbPb$ collisions at 5.02 TeV**”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1712.08959 [nucl-ex]
DOI:10.1140/epjc/s10052-018-5950-6
Eur. Phys. J. C **78**, no. 6, 509 (2018)
CMS-HIN-16-025, CERN-EP-2017-308 <http://inspirehep.net/record/1644903> 52 citations counted in INSPIRE as of 13 Feb 2020
195. “**Search for R -parity violating supersymmetry in pp collisions at $\sqrt{s} = 13$ TeV using b jets in a final state with a single lepton, many jets, and high sum of large-radius jet**”

masses”

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

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DOI:10.1016/j.physletb.2018.06.028

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CMS-SUS-16-040, CERN-EP-2017-312 <http://inspirehep.net/record/1644901> 11 citations counted in INSPIRE as of 13 Feb 2020

196. “**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**”
- A. M. Sirunyan *et al.* [CMS Collaboration].
- arXiv:1712.08501 [hep-ex]
- DOI:10.1103/PhysRevLett.120.241801
- Phys. Rev. Lett. **120**, no. 24, 241801 (2018)
- CMS-SUS-17-006, CERN-EP-2017-322 <http://inspirehep.net/record/1644788> 16 citations counted in INSPIRE as of 13 Feb 2020
197. “**Bose-Einstein correlations in pp , $p\text{Pb}$, and PbPb collisions at $\sqrt{s_{NN}} = 0.9 - 7 \text{ TeV}$** ”
- A. M. Sirunyan *et al.* [CMS Collaboration].
- arXiv:1712.07198 [hep-ex]
- DOI:10.1103/PhysRevC.97.064912
- Phys. Rev. C **97**, no. 6, 064912 (2018)
- CMS-FSQ-14-002, CERN-EP-2017-327 <http://inspirehep.net/record/1644364> 18 citations counted in INSPIRE as of 13 Feb 2020
198. “**Search for lepton flavour violating decays of the Higgs boson to $\mu\tau$ and $e\tau$ in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
- A. M. Sirunyan *et al.* [CMS Collaboration].
- arXiv:1712.07173 [hep-ex]
- DOI:10.1007/JHEP06(2018)001
- JHEP **1806**, 001 (2018)
- CMS-HIG-17-001, CERN-EP-2017-292 <http://inspirehep.net/record/1644363> 53 citations counted in INSPIRE as of 13 Feb 2020
199. “**Identification of heavy-flavour jets with the CMS detector in pp collisions at 13 TeV**”
- A. M. Sirunyan *et al.* [CMS Collaboration].
- arXiv:1712.07158 [physics.ins-det]
- DOI:10.1088/1748-0221/13/05/P05011
- JINST **13**, no. 05, P05011 (2018)
- CMS-BTV-16-002, CERN-EP-2017-326 <http://inspirehep.net/record/1644362> 382 citations counted in INSPIRE as of 13 Feb 2020
200. “**Search for the $X(5568)$ state decaying into $B_s^0\pi^\pm$ in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$** ”
- A. M. Sirunyan *et al.* [CMS Collaboration].
- arXiv:1712.06144 [hep-ex]
- DOI:10.1103/PhysRevLett.120.202005
- Phys. Rev. Lett. **120**, no. 20, 202005 (2018)
- CMS-BPH-16-002, CERN-EP-2017-287 <http://inspirehep.net/record/1643829> 42 citations counted in INSPIRE as of 13 Feb 2020
201. “**Azimuthal correlations for inclusive 2-jet, 3-jet, and 4-jet events in pp collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
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JHEP **1809**, 148 (2018)
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DOI:10.1016/j.physletb.2018.02.025
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP06(2018)102
JHEP **1806**, 102 (2018)
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1103/PhysRevD.97.092005
Phys. Rev. D **97**, no. 9, 092005 (2018)
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206. “Constraints on the double-parton scattering cross section from same-sign W boson pair production in proton-proton collisions at $\sqrt{s} = 8$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1712.02280 [hep-ex]
DOI:10.1007/JHEP02(2018)032
JHEP **1802**, 032 (2018)
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207. “Search for pair production of excited top quarks in the lepton + jets final state”
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- A. M. Sirunyan *et al.* [CMS Collaboration].
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209. “Search for new long-lived particles at $\sqrt{s} = 13$ TeV”
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP07(2018)032
JHEP **1807**, 032 (2018)
CMS-FSQ-16-008, CERN-EP-2017-249 <http://inspirehep.net/record/1635889> 20 citations counted in INSPIRE as of 13 Feb 2020

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arXiv:1711.03143 [hep-ex]
DOI:10.1007/JHEP03(2018)115
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DOI:10.1007/JHEP08(2018)011
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DOI:10.1140/epjc/s10052-018-5752-x
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DOI:10.1140/epjc/s10052-018-5740-1
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DOI:10.1016/j.physletb.2018.02.033
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DOI:10.1140/epjc/s10052-018-5607-5
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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1710.09355 [hep-ex]
DOI:10.1007/JHEP01(2018)045
JHEP **1801**, 045 (2018)
CMS-HIN-16-021, CERN-EP-2017-261 <http://inspirehep.net/record/1632453> 13 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP02(2018)067
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CMS-SUS-16-041, CERN-EP-2017-243 <http://inspirehep.net/record/1632447> 19 citations counted in INSPIRE as of 13 Feb 2020
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CMS-BPH-13-008, CERN-EP-2017-244 <http://inspirehep.net/record/1632444> 21 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP03(2018)172
JHEP **1803**, 172 (2018)
CMS-SMP-17-002, CERN-EP-2017-234 <http://inspirehep.net/record/1631985> 9 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1016/j.physletb.2018.03.084
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DOI:10.1140/epjc/s10052-018-5691-6
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1016/j.physletb.2018.01.077
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP01(2018)097
JHEP **1801**, 097 (2018)
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CMS-SUS-16-042, CERN-EP-2017-201 <http://inspirehep.net/record/1627612> 13 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/s13130-018-7845-2, 10.1007/JHEP03(2018)076
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CMS-SMP-16-017, CERN-EP-2017-219 <http://inspirehep.net/record/1625296> 54 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1016/j.physletb.2018.02.050
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CMS-HIG-16-044, CERN-EP-2017-233 <http://inspirehep.net/record/1625108> 105 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1709.07411 [nucl-ex]
DOI:10.1103/PhysRevLett.119.242001
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CMS-HIN-17-002, CERN-EP-2017-239 <http://inspirehep.net/record/1624694> 39 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1103/PhysRevLett.120.081801
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1103/PhysRevLett.120.071802
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CMS-HIG-17-010, CERN-EP-2017-207 <http://inspirehep.net/record/1624166> 79 citations counted in INSPIRE as of 13 Feb 2020

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A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1709.05406 [hep-ex]
DOI:10.1007/JHEP03(2018)166
JHEP **1803**, 166 (2018)
CMS-SUS-16-039, CERN-EP-2017-121 <http://inspirehep.net/record/1624165> 92 citations counted in INSPIRE as of 13 Feb 2020
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DOI:10.1007/JHEP04(2018)033
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243. “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 $H \rightarrow b\bar{b}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1103/PhysRevD.97.032007
Phys. Rev. D **97**, no. 3, 032007 (2018)
CMS-SUS-16-044, CERN-EP-2017-127 <http://inspirehep.net/record/1623562> 23 citations counted in INSPIRE as of 13 Feb 2020
244. “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]
DOI:10.1016/j.physletb.2017.12.069
Phys. Lett. B **779**, 166 (2018)
CMS-SUS-16-045, CERN-EP-2017-158 <http://inspirehep.net/record/1621281> 16 citations counted in INSPIRE as of 13 Feb 2020
245. “Measurement of the Splitting Function in pp and Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1103/PhysRevLett.120.142302
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CMS-HIN-16-006, CERN-EP-2017-205 <http://inspirehep.net/record/1620905> 66 citations counted in INSPIRE as of 13 Feb 2020
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DOI:10.1103/PhysRevC.100.064908
Phys. Rev. C **100**, no. 6, 064908 (2019)
CMS-HIN-16-0017, CERN-EP-2017-180 <http://inspirehep.net/record/1620518> 14 citations counted in INSPIRE as of 13 Feb 2020
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CMS-B2G-17-010, CERN-EP-2017-196 <http://inspirehep.net/record/1620470> 29 citations counted
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A. M. Sirunyan *et al.* [CMS Collaboration].
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249. “Measurement of normalized differential $t\bar{t}$ cross sections in the dilepton channel from pp collisions at $\sqrt{s} = 13\text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1708.07638 [hep-ex]
DOI:10.1007/JHEP04(2018)060
JHEP **1804**, 060 (2018)
CMS-TOP-16-007, CERN-EP-2017-120 <http://inspirehep.net/record/1620050> 56 citations counted
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250. “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]
DOI:10.1103/PhysRevC.96.064902
Phys. Rev. C **96**, no. 6, 064902 (2017)
CMS-HIN-15-010, CERN-EP-2017-133 <http://inspirehep.net/record/1618346> 10 citations counted
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251. “Search for massive resonances decaying into WW , WZ , ZZ , qW , and qZ with dijet final states at $\sqrt{s} = 13\text{TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1708.05379 [hep-ex]
DOI:10.1103/PhysRevD.97.072006
Phys. Rev. D **97**, no. 7, 072006 (2018)
CMS-B2G-17-001, CERN-EP-2017-184 <http://inspirehep.net/record/1616497> 63 citations counted
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252. “Nuclear modification factor of D^0 mesons in PbPb collisions at $\sqrt{s_{NN}} = 5.02\text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1708.04962 [nucl-ex]
DOI:10.1016/j.physletb.2018.05.074
Phys. Lett. B **782**, 474 (2018)
CMS-HIN-16-001, CERN-EP-2017-186 <http://inspirehep.net/record/1616207> 89 citations counted
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253. “Search for resonant and nonresonant Higgs boson pair production in the $b\bar{b}\ell\nu\ell\nu$ final state in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP01(2018)054
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CMS-HIG-17-006, CERN-EP-2017-168 <http://inspirehep.net/record/1615868> 63 citations counted
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254. “**Measurement of prompt D^0 meson azimuthal anisotropy in Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$** ”
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A. M. Sirunyan *et al.* [CMS Collaboration].
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257. “**Search for single production of a vector-like T quark decaying to a Z boson and a top quark in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
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arXiv:1708.01062 [hep-ex]
DOI:10.1016/j.physletb.2018.04.036
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259. “**Search for a light pseudoscalar Higgs boson produced in association with bottom quarks in pp collisions at $\sqrt{s} = 8 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP11(2017)010
JHEP **1711**, 010 (2017)
CMS-HIG-15-009, CERN-EP-2017-159 <http://inspirehep.net/record/1611300> 21 citations counted in INSPIRE as of 13 Feb 2020
260. “**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 $\sqrt{s} = 13 \text{ TeV}$** ”
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261. “Search for supersymmetry in events with at least one photon, missing transverse momentum, and large transverse event activity in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1707.06193 [hep-ex]
DOI:10.1007/JHEP12(2017)142
JHEP **1712**, 142 (2017)
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262. “Measurement of the differential cross sections for the associated production of a W boson and jets in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP03(2018)167
JHEP **1803**, 167 (2018)
CMS-SUS-15-009, CERN-EP-2017-124 <http://inspirehep.net/record/1609450> 1 citations counted in INSPIRE as of 13 Feb 2020
264. “Search for direct production of supersymmetric partners of the top quark in the all-jets final state in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP10(2017)005
JHEP **1710**, 005 (2017)
CMS-SUS-16-049, CERN-EP-2017-129 <http://inspirehep.net/record/1609449> 72 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
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A. M. Sirunyan *et al.* [CMS Collaboration].
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arXiv:1707.00541 [hep-ex]
DOI:10.1016/j.physletb.2017.10.021
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268. “**Search for Higgs boson pair production in the $b\bar{b}\tau\tau$ final state in proton-proton collisions at $\sqrt{s} = 8\text{TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1707.00350 [hep-ex]
DOI:10.1103/PhysRevD.96.072004
Phys. Rev. D **96**, no. 7, 072004 (2017)
CMS-HIG-15-013, CERN-EP-2017-104 <http://inspirehep.net/record/1608383> 30 citations counted in INSPIRE as of 13 Feb 2020
269. “**Measurement of charged pion, kaon, and proton production in proton-proton collisions at $\sqrt{s} = 13\text{TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1103/PhysRevD.96.112003
Phys. Rev. D **96**, no. 11, 112003 (2017)
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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP11(2017)047
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271. “**Search for electroweak production of charginos and neutralinos in WH events in proton-proton collisions at $\sqrt{s} = 13\text{TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1706.09933 [hep-ex]
DOI:10.1007/JHEP11(2017)029
JHEP **1711**, 029 (2017)
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272. “**Search for a heavy composite Majorana neutrino in the final state with two leptons and two quarks at $\sqrt{s} = 13\text{TeV}$** ”
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DOI:10.1016/j.physletb.2017.11.001
Phys. Lett. B **775**, 315 (2017)
CMS-EXO-16-026, CERN-EP-2017-125 <http://inspirehep.net/record/1607793> 19 citations counted in INSPIRE as of 13 Feb 2020
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DOI:10.1007/JHEP10(2017)006

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- A. M. Sirunyan *et al.* [CMS Collaboration].
- arXiv:1706.05984 [hep-ex]
- DOI:10.1103/PhysRevLett.120.142301
- Phys. Rev. Lett. **120**, no. 14, 142301 (2018)
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275. "Measurements of jet charge with dijet events in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ "
- A. M. Sirunyan *et al.* [CMS Collaboration].
- arXiv:1706.05868 [hep-ex]
- DOI:10.1007/JHEP10(2017)131
- JHEP **1710**, 131 (2017)
- CMS-SMP-15-003, CERN-EP-2017-085 <http://inspirehep.net/record/1605749> 17 citations counted in INSPIRE as of 13 Feb 2020
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- DOI:10.1088/1748-0221/12/10/P10003
- JINST **12**, no. 10, P10003 (2017)
- CMS-PRF-14-001, CERN-EP-2017-110 <http://inspirehep.net/record/1605397> 677 citations counted in INSPIRE as of 13 Feb 2020
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- A. M. Sirunyan *et al.* [CMS Collaboration].
- arXiv:1706.04402 [hep-ex]
- DOI:10.1007/JHEP10(2017)019
- JHEP **1710**, 019 (2017)
- CMS-SUS-16-051, CERN-EP-2017-109 <http://inspirehep.net/record/1605128> 75 citations counted in INSPIRE as of 13 Feb 2020
278. "Searches for W? 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 <http://inspirehep.net/record/1605124> 19 citations counted in INSPIRE as of 13 Feb 2020
279. "Search for new physics in the monophoton final state in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ "
- A. M. Sirunyan *et al.* [CMS Collaboration].
- arXiv:1706.03794 [hep-ex]
- DOI:10.1007/JHEP10(2017)073
- JHEP **1710**, 073 (2017)
- CMS-EXO-16-039, CERN-EP-2017-097 <http://inspirehep.net/record/1604886> 40 citations counted

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A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP11(2017)085
JHEP **1711**, 085 (2017)
CMS-B2G-16-024, CERN-EP-2017-107 <http://inspirehep.net/record/1604273> 41 citations counted in INSPIRE as of 13 Feb 2020
281. “Search for dark matter produced in association with heavy-flavor quark pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1140/epjc/s10052-017-5317-4
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282. “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].
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DOI:10.1007/JHEP08(2017)073
JHEP **1708**, 073 (2017)
CMS-B2G-15-006, CERN-EP-2017-102 <http://inspirehep.net/record/1601901> 14 citations counted in INSPIRE as of 13 Feb 2020
283. “Search for Low Mass Vector Resonances Decaying to Quark-Antiquark Pairs in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1103/PhysRevLett.119.111802
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284. “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 $\sqrt{s} = 13$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1705.10141 [hep-ex]
DOI:10.1016/j.physletb.2017.11.043
Phys. Lett. B **776**, 355 (2018)
CMS-TOP-16-010, CERN-EP-2017-069 <http://inspirehep.net/record/1601505> 44 citations counted in INSPIRE as of 13 Feb 2020
285. “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].
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DOI:10.1016/j.physletb.2017.09.083
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CMS-B2G-16-007, CERN-EP-2017-077 <http://inspirehep.net/record/1601294> 43 citations counted in INSPIRE as of 13 Feb 2020
286. “Measurement of the B^\pm Meson Nuclear Modification Factor in Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV”

- A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1705.04727 [hep-ex]
DOI:10.1103/PhysRevLett.119.152301
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CMS-HIN-16-011, CERN-EP-2017-076 <http://inspirehep.net/record/1599548> 66 citations counted in INSPIRE as of 13 Feb 2020
287. “Search for Supersymmetry in pp Collisions at $\sqrt{s} = 13\text{TeV}$ in the Single-Lepton Final State Using the Sum of Masses of Large-Radius Jets”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1103/PhysRevLett.119.151802
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CMS-SUS-16-037, CERN-EP-2017-088 <http://inspirehep.net/record/1599402> 31 citations counted in INSPIRE as of 13 Feb 2020
288. “Search for new phenomena with the M_{T2} variable in the all-hadronic final state produced in proton?proton collisions at $\sqrt{s} = 13\text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1140/epjc/s10052-017-5267-x
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CMS-SUS-16-036, CERN-EP-2017-084 <http://inspirehep.net/record/1599400> 116 citations counted in INSPIRE as of 13 Feb 2020
289. “Search for Charged Higgs Bosons Produced via Vector Boson Fusion and Decaying into a Pair of W and Z Bosons Using pp Collisions at $\sqrt{s} = 13\text{TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1103/PhysRevLett.119.141802
Phys. Rev. Lett. **119**, no. 14, 141802 (2017)
CMS-HIG-16-027, CERN-EP-2017-068 <http://inspirehep.net/record/1598467> 51 citations counted in INSPIRE as of 13 Feb 2020
290. “Measurement of the triple-differential dijet cross section in proton-proton collisions at $\sqrt{s} = 8\text{TeV}$ and constraints on parton distribution functions”
A. M. Sirunyan *et al.* [CMS Collaboration].
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DOI:10.1140/epjc/s10052-017-5286-7
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CMS-SMP-16-011, CERN-EP-2017-061 <http://inspirehep.net/record/1598460> 26 citations counted in INSPIRE as of 13 Feb 2020
291. “Search for black holes in high-multiplicity final states in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1705.01403 [hep-ex]
DOI:10.1016/j.physletb.2017.09.053
Phys. Lett. B **774**, 279 (2017)
CMS-EXO-15-007, CERN-EP-2017-074 <http://inspirehep.net/record/1598036> 27 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
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Phys. Rev. D **96**, no. 3, 032003 (2017)

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293. “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 $\sqrt{s} = 13 \text{ TeV}$ ”
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 <http://inspirehep.net/record/1594731> 79 citations counted in INSPIRE as of 13 Feb 2020
294. “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 $\sqrt{s} = 8 \text{ TeV}$ ”
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DOI:10.1103/PhysRevD.96.032002
Phys. Rev. D **96**, no. 3, 032002 (2017)
CMS-TOP-15-008, CERN-EP-2017-050 <http://inspirehep.net/record/1593762> 25 citations counted in INSPIRE as of 13 Feb 2020
295. “Search for $t\bar{t}$ resonances in highly boosted lepton+jets and fully hadronic final states in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ ”
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 <http://inspirehep.net/record/1591147> 49 citations counted in INSPIRE as of 13 Feb 2020
296. “Measurements of the $pp \rightarrow W\gamma\gamma$ and $pp \rightarrow Z\gamma\gamma$ cross sections and limits on anomalous quartic gauge couplings at $\sqrt{s} = 8 \text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1704.00366 [hep-ex]
DOI:10.1007/JHEP10(2017)072
JHEP **1710**, 072 (2017)
CMS-SMP-15-008, CERN-EP-2017-039 <http://inspirehep.net/record/1589287> 14 citations counted in INSPIRE as of 13 Feb 2020
297. “Search for new physics with dijet angular distributions in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ ”
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 <http://inspirehep.net/record/1519995> 25 citations counted in INSPIRE as of 13 Feb 2020
298. “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].
arXiv:1703.06352 [hep-ex]
DOI:10.1007/JHEP09(2017)053
JHEP **1709**, 053 (2017)
CMS-B2G-16-013, CERN-EP-2017-035 <http://inspirehep.net/record/1518400> 15 citations counted in INSPIRE as of 13 Feb 2020

299. “**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].
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DOI:10.1140/epjc/s10052-017-5030-3
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CMS-TOP-15-015, CERN-EP-2017-018 <http://inspirehep.net/record/1518399> 21 citations counted in INSPIRE as of 13 Feb 2020
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A. M. Sirunyan *et al.* [CMS Collaboration].
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Phys. Lett. B **772**, 21 (2017)
CMS-SMP-13-008, CERN-EP-2017-029 <http://inspirehep.net/record/1518145> 39 citations counted in INSPIRE as of 13 Feb 2020
301. “**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]
DOI:10.1007/JHEP10(2017)180
JHEP **1710**, 180 (2017)
CMS-EXO-16-012, CERN-EP-2017-027 <http://inspirehep.net/record/1517496> 59 citations counted in INSPIRE as of 13 Feb 2020
302. “**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 <http://inspirehep.net/record/1517191> 92 citations counted in INSPIRE as of 13 Feb 2020
303. “**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].
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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 <http://inspirehep.net/record/1516412> 19 citations counted in INSPIRE as of 13 Feb 2020
304. “**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 <http://inspirehep.net/record/1516193> 127 citations counted in INSPIRE as of 13 Feb 2020
305. “**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].

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306. “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].
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DOI:10.1016/j.physletb.2017.06.064
Phys. Lett. B **772**, 336 (2017)
CMS-TOP-16-016, CERN-EP-2017-023 <http://inspirehep.net/record/1514542> 28 citations counted in INSPIRE as of 13 Feb 2020
307. “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 $\sqrt{s} = 8$ TeV”
V. Khachatryan *et al.* [CMS Collaboration].
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DOI:10.1016/j.physletb.2017.04.071
Phys. Lett. B **770**, 380 (2017)
CMS-SMP-14-018, CERN-EP-2016-308 <http://inspirehep.net/record/1512924> 26 citations counted in INSPIRE as of 13 Feb 2020
308. “Measurement of prompt and nonprompt J/ψ production in pp and pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1702.01462 [nucl-ex]
DOI:10.1140/epjc/s10052-017-4828-3
Eur. Phys. J. C **77**, no. 4, 269 (2017)
CMS-HIN-14-009, CERN-EP-2017-009 <http://inspirehep.net/record/1512296> 28 citations counted in INSPIRE as of 13 Feb 2020
309. “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)
CMS-TOP-12-039, CERN-EP-2016-324 <http://inspirehep.net/record/1512295> 57 citations counted in INSPIRE as of 13 Feb 2020
310. “Study of Jet Quenching with $Z + jet$ Correlations in Pb-Pb and pp Collisions at $\sqrt{s_{NN}} = 5.02$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1702.01060 [nucl-ex]
DOI:10.1103/PhysRevLett.119.082301
Phys. Rev. Lett. **119**, no. 8, 082301 (2017)
CMS-HIN-15-013, CERN-EP-2017-002 <http://inspirehep.net/record/1512112> 45 citations counted in INSPIRE as of 13 Feb 2020
311. “Azimuthal anisotropy of charged particles with transverse momentum up to 100 GeV/ c in PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1702.00630 [hep-ex]
DOI:10.1016/j.physletb.2017.11.041
Phys. Lett. B **776**, 195 (2018)

CMS-HIN-15-014, CERN-EP-2017-001 <http://inspirehep.net/record/1511868> 43 citations counted in INSPIRE as of 13 Feb 2020

312. “**Measurement of the inclusive energy spectrum in the very forward direction in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
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 <http://inspirehep.net/record/1511284> 20 citations counted in INSPIRE as of 13 Feb 2020
313. “**Search for single production of vector-like quarks decaying into a b quark and a W boson in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1701.08328 [hep-ex]
DOI:10.1016/j.physletb.2017.07.022
Phys. Lett. B **772**, 634 (2017)
CMS-B2G-16-006, CERN-EP-2016-319 <http://inspirehep.net/record/1511277> 40 citations counted in INSPIRE as of 13 Feb 2020
314. “**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 $\sqrt{s} = 13 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1701.07409 [hep-ex]
DOI:10.1007/JHEP05(2017)029
JHEP **1705**, 029 (2017)
CMS-B2G-16-001, CERN-EP-2016-326 <http://inspirehep.net/record/1510567> 33 citations counted in INSPIRE as of 13 Feb 2020
315. “**Search for new phenomena with multiple charged leptons in proton?proton collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
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)
CMS-SUS-16-003, CERN-EP-2016-306 <http://inspirehep.net/record/1510442> 16 citations counted in INSPIRE as of 13 Feb 2020
316. “**Measurement of the $t\bar{t}$ production cross section using events with one lepton and at least one jet in pp collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
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 <http://inspirehep.net/record/1510260> 63 citations counted in INSPIRE as of 13 Feb 2020
317. “**Search for dark matter and unparticles in events with a Z boson and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$** ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1701.02042 [hep-ex]
DOI:10.1007/JHEP01(2018)056, 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 <http://inspirehep.net/record/1508174> 35 citations counted in INSPIRE as of 13 Feb 2020
318. “**Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton col-**

lisions at $\sqrt{s} = 8$ TeV”

V. Khachatryan *et al.* [CMS Collaboration].

arXiv:1701.02032 [hep-ex]

DOI:10.1007/JHEP10(2017)076

JHEP **1710**, 076 (2017)

CMS-HIG-16-015, CERN-EP-2016-292 <http://inspirehep.net/record/1508173> 70 citations counted in INSPIRE as of 13 Feb 2020

319. “**Mechanical stability of the CMS strip tracker measured with a laser alignment system**”
- A. M. Sirunyan *et al.* [CMS Collaboration].
- arXiv:1701.02022 [physics.ins-det]
- DOI:10.1088/1748-0221/12/04/P04023
- JINST **12**, no. 04, P04023 (2017)
- CMS-TRK-15-002, CERN-EP-2016-320 <http://inspirehep.net/record/1508172> 4 citations counted in INSPIRE as of 13 Feb 2020
320. “**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 <http://inspirehep.net/record/1508171> 31 citations counted in INSPIRE as of 13 Feb 2020
321. “**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
- Phys. Lett. B **773**, 563 (2017)
- CMS-EXO-14-006, CERN-EP-2016-295 <http://inspirehep.net/record/1507892> 8 citations counted in INSPIRE as of 13 Feb 2020
322. “**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 <http://inspirehep.net/record/1507303> 17 citations counted in INSPIRE as of 13 Feb 2020
323. “**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)
- CMS-EXO-15-006, CERN-EP-2016-281 <http://inspirehep.net/record/1507096> 51 citations counted in INSPIRE as of 13 Feb 2020
324. “**Measurement of electroweak-induced production of $W\gamma$ 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 <http://inspirehep.net/record/1507095> 24 citations counted
in INSPIRE as of 13 Feb 2020

325. “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 <http://inspirehep.net/record/1507094> 55 citations counted
in INSPIRE as of 13 Feb 2020
326. “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]
DOI:10.1016/j.physletb.2017.06.053
Phys. Lett. B **772**, 306 (2017)
CMS-HIN-15-012, CERN-EP-2016-274 <http://inspirehep.net/record/1507091> 16 citations counted
in INSPIRE as of 13 Feb 2020
327. “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)
CMS-B2G-16-005, CERN-EP-2016-290 <http://inspirehep.net/record/1504209> 28 citations counted
in INSPIRE as of 13 Feb 2020
328. “Searches for pair production of third-generation squarks in $\sqrt{s} = 13$ TeV pp collisions”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1612.03877 [hep-ex]
DOI:10.1140/epjc/s10052-017-4853-2
Eur. Phys. J. C **77**, no. 5, 327 (2017)
CMS-SUS-16-008, CERN-EP-2016-284 <http://inspirehep.net/record/1502925> 44 citations counted
in INSPIRE as of 13 Feb 2020
329. “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)
CMS-EXO-16-016, CERN-EP-2016-286 <http://inspirehep.net/record/1501683> 51 citations counted
in INSPIRE as of 13 Feb 2020
330. “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].
arXiv:1612.00999 [hep-ex]
DOI:10.1016/j.physletb.2017.05.019
Phys. Lett. B **771**, 80 (2017)
CMS-B2G-15-008, CERN-EP-2016-279 <http://inspirehep.net/record/1501681> 33 citations counted
in INSPIRE as of 13 Feb 2020

331. “Search for CP violation in $t\bar{t}$ production and decay in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1611.08931 [hep-ex]
 DOI:10.1007/JHEP03(2017)101
JHEP **1703**, 101 (2017)
 CMS-TOP-16-001, CERN-EP-2016-266, CMS-TO-16-001 <http://inspirehep.net/record/1500513>
 12 citations counted in INSPIRE as of 13 Feb 2020
332. “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)
 CMS-SUS-15-012, CERN-EP-2016-269 <http://inspirehep.net/record/1499477> 11 citations counted in INSPIRE as of 13 Feb 2020
333. “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 <http://inspirehep.net/record/1499476> 46 citations counted in INSPIRE as of 13 Feb 2020
334. “Measurements of the associated production of a Z boson and b jets in pp collisions at $\sqrt{s} = 8 \text{ TeV}^*$ ”
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1611.06507 [hep-ex]
 DOI:10.1140/epjc/s10052-017-5140-y
Eur. Phys. J. C **77**, no. 11, 751 (2017)
 CMS-SMP-14-010, CERN-EP-2016-254 <http://inspirehep.net/record/1499471> 29 citations counted in INSPIRE as of 13 Feb 2020
335. “Measurement of the $t\bar{t}$ production cross section using events in the $e\mu$ final state in pp collisions at $\sqrt{s} = 13 \text{ TeV}^*$ ”
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1611.04040 [hep-ex]
 DOI:10.1140/epjc/s10052-017-4718-8
Eur. Phys. J. C **77**, 172 (2017)
 CMS-TOP-16-005, CERN-EP-2016-265 <http://inspirehep.net/record/1497736> 71 citations counted in INSPIRE as of 13 Feb 2020
336. “Measurements of differential production cross sections for a Z boson in association with jets in pp collisions at $\sqrt{s} = 8 \text{ TeV}^*$ ”
 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 <http://inspirehep.net/record/1497519> 29 citations counted in INSPIRE as of 13 Feb 2020
337. “Search for dijet resonances in proton?proton collisions at $\sqrt{s} = 13 \text{ TeV}$ and constraints on dark matter and other models”
 A. M. Sirunyan *et al.* [CMS Collaboration].
 arXiv:1611.03568 [hep-ex]

DOI:10.1016/j.physletb.2017.09.029, 10.1016/j.physletb.2017.02.012
Phys. Lett. B **769**, 520 (2017), Erratum: [Phys. Lett. B **772**, 882 (2017)]
CMS-EXO-16-032, CERN-EP-2016-277 <http://inspirehep.net/record/1497514> 143 citations counted
in INSPIRE as of 13 Feb 2020

338. “Charged-particle nuclear modification factors in PbPb and pPb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$ ”
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 <http://inspirehep.net/record/1496050> 145 citations counted
in INSPIRE as of 13 Feb 2020
339. “Suppression of $\Upsilon(1S)$, $\Upsilon(2S)$ and $\Upsilon(3S)$ production in PbPb collisions at $\sqrt{s_{NN}} = 2.76 \text{ TeV}$ ”
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 <http://inspirehep.net/record/1495866> 86 citations counted
in INSPIRE as of 13 Feb 2020
340. “Relative Modification of Prompt $\Upsilon(2S)$ and J/ψ Yields from pp to PbPb Collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$ ”
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv:1611.01438 [nucl-ex]
DOI:10.1103/PhysRevLett.118.162301
Phys. Rev. Lett. **118**, no. 16, 162301 (2017)
CMS-HIN-16-004, CERN-EP-2016-258 <http://inspirehep.net/record/1495840> 41 citations counted
in INSPIRE as of 13 Feb 2020
341. “A search for new phenomena in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ in final states with missing transverse momentum and at least one jet using the α_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)
CMS-SUS-15-005, CERN-EP-2016-246 <http://inspirehep.net/record/1495423> 36 citations counted
in INSPIRE as of 13 Feb 2020
342. “Searches for invisible decays of the Higgs boson in pp collisions at $\sqrt{s} = 7, 8, \text{ and } 13 \text{ TeV}$ ”
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 <http://inspirehep.net/record/1495025> 190 citations counted
in INSPIRE as of 13 Feb 2020
343. “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
Phys. Lett. B **768**, 137 (2017)
CMS-B2G-16-003, CERN-EP-2016-226 <http://inspirehep.net/record/1494580> 40 citations counted
in INSPIRE as of 13 Feb 2020

344. “**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 <http://inspirehep.net/record/1494067> 53 citations counted in INSPIRE as of 13 Feb 2020
345. “**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 <http://inspirehep.net/record/1492321> 18 citations counted in INSPIRE as of 13 Feb 2020
346. “**Search for electroweak production of charginos in final states with two ? 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 <http://inspirehep.net/record/1492317> 22 citations counted in INSPIRE as of 13 Feb 2020
347. “**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 <http://inspirehep.net/record/1492316> 46 citations counted in INSPIRE as of 13 Feb 2020
348. “**Measurements of differential cross sections for associated production of a W boson and jets in proton-proton collisions at $\sqrt{s} = 8$ TeV**”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1610.04222 [hep-ex]
DOI:10.1103/PhysRevD.95.052002
Phys. Rev. D **95**, 052002 (2017)
CMS-SMP-14-023, CERN-EP-2016-231, CERN-PH-EP-2016-231 <http://inspirehep.net/record/1491953> 24 citations counted in INSPIRE as of 13 Feb 2020
349. “**Measurement of differential cross sections for top quark pair production using the lepton+jets final state in proton-proton collisions at 13 TeV**”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1610.04191 [hep-ex]
DOI:10.1103/PhysRevD.95.092001
Phys. Rev. D **95**, no. 9, 092001 (2017)
CMS-TOP-16-008, CERN-EP-2016-227 <http://inspirehep.net/record/1491950> 144 citations counted in INSPIRE as of 13 Feb 2020
350. “**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**”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1610.03545 [hep-ex]
DOI:10.1007/JHEP02(2017)028

JHEP **1702**, 028 (2017)
CMS-TOP-14-007, CERN-EP-2016-207 <http://inspirehep.net/record/1491379> 55 citations counted
in INSPIRE as of 13 Feb 2020

351. “Search for high-mass $Z\gamma$ 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 <http://inspirehep.net/record/1490903> 20 citations counted
in INSPIRE as of 13 Feb 2020
352. “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].
arXiv:1610.00678 [hep-ex]
DOI:10.1016/j.physletb.2017.07.047
Phys. Lett. B **772**, 752 (2017)
CMS-TOP-16-003, CERN-EP-2016-233 <http://inspirehep.net/record/1489193> 106 citations counted
in INSPIRE as of 13 Feb 2020
353. “Suppression and azimuthal anisotropy of prompt and nonprompt J/ψ production in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1610.00613 [nucl-ex]
DOI:10.1140/epjc/s10052-017-4781-1
Eur. Phys. J. C **77**, no. 4, 252 (2017)
CMS-HIN-14-005, CERN-EP-2016-243 <http://inspirehep.net/record/1489189> 89 citations counted
in INSPIRE as of 13 Feb 2020
354. “Observation of charge-dependent azimuthal correlations in p -Pb collisions and its implication for the search for the chiral magnetic effect”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1610.00263 [nucl-ex]
DOI:10.1103/PhysRevLett.118.122301
Phys. Rev. Lett. **118**, no. 12, 122301 (2017)
CMS-HIN-16-009, CERN-EP-2016-236 <http://inspirehep.net/record/1489183> 92 citations counted
in INSPIRE as of 13 Feb 2020
355. “Search for supersymmetry in events with one lepton and multiple jets in proton-proton collisions at $\sqrt{s} = 13$ TeV”
V. Khachatryan *et al.* [CMS Collaboration].
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 <http://inspirehep.net/record/1488581> 16 citations counted
in INSPIRE as of 13 Feb 2020
356. “Search for long-lived charged particles in proton-proton collisions at $\sqrt{s} = 13$ TeV”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1609.08382 [hep-ex]
DOI:10.1103/PhysRevD.94.112004
Phys. Rev. D **94**, no. 11, 112004 (2016)
CMS-EXO-15-010, CERN-EP-2016-204 <http://inspirehep.net/record/1488280> 101 citations counted
in INSPIRE as of 13 Feb 2020
357. “Inclusive search for supersymmetry using razor variables in pp collisions at $\sqrt{s} = 13$

TeV”

V. Khachatryan *et al.* [CMS Collaboration].

arXiv:1609.07658 [hep-ex]

DOI:10.1103/PhysRevD.95.012003

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

CMS-SUS-15-004, CERN-EP-2016-214 <http://inspirehep.net/record/1488103> 38 citations counted in INSPIRE as of 13 Feb 2020

358. “**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 $\sqrt{s} = 8\text{TeV}$** ”
- V. Khachatryan *et al.* [CMS Collaboration].
- arXiv:1609.05721 [hep-ex]
- DOI:10.1140/epjc/s10052-017-4730-z
- Eur. Phys. J. C **77**, no. 4, 236 (2017)
- CMS-SMP-14-014, CERN-EP-2016-205 <http://inspirehep.net/record/1487288> 44 citations counted in INSPIRE as of 13 Feb 2020
359. “**Search for narrow resonances in dilepton mass spectra in proton-proton collisions at $\sqrt{s} = 13$ TeV and combination with 8 TeV data”**
- V. Khachatryan *et al.* [CMS Collaboration].
- arXiv:1609.05391 [hep-ex]
- DOI:10.1016/j.physletb.2017.02.010
- Phys. Lett. B **768**, 57 (2017)
- CMS-EXO-15-005, CERN-EP-2016-209 <http://inspirehep.net/record/1487279> 104 citations counted in INSPIRE as of 13 Feb 2020
360. “**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 <http://inspirehep.net/record/1487278> 81 citations counted in INSPIRE as of 13 Feb 2020
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DOI:10.1007/JHEP10(2016)129

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 CMS-TOP-13-009, CERN-EP-2016-045 <http://inspirehep.net/record/1426696> 60 citations counted in INSPIRE as of 13 Feb 2020
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CMS-EXO-14-014, CERN-EP-2016-032 <http://inspirehep.net/record/1426525> 65 citations counted
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415. “**Measurement of the $Z\gamma \rightarrow \nu\bar{\nu}\gamma$ production cross section in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ and limits on anomalous ZZ γ and Z $\gamma\gamma$ trilinear gauge boson couplings**
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1602.07152 [hep-ex]
DOI:10.1016/j.physletb.2016.06.080
Phys. Lett. B **760**, 448 (2016)
CMS-SMP-14-019, CERN-EP-2016-007 <http://inspirehep.net/record/1423069> 20 citations counted
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 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1602.06581 [hep-ex]
 DOI:10.1016/j.physletb.2016.05.002
Phys. Lett. B **758**, 152 (2016)
 CMS-SUS-15-002, CERN-EP-2016-036 <http://inspirehep.net/record/1422778> 77 citations counted in INSPIRE as of 13 Feb 2020
417. “**Measurement of dijet azimuthal decorrelation in pp collisions at $\sqrt{s} = 8 \text{ TeV}$** ”
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1602.04384 [hep-ex]
 DOI:10.1140/epjc/s10052-016-4346-8
Eur. Phys. J. C **76**, no. 10, 536 (2016)
 CMS-SMP-14-015, CERN-EP-2016-013, CERN-SMP-14-015 <http://inspirehep.net/record/1421646> 18 citations counted in INSPIRE as of 13 Feb 2020
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 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1602.04334 [hep-ex]
 DOI:10.1016/j.physletb.2016.06.039
Phys. Lett. B **760**, 178 (2016)
 CMS-EXO-14-013, CERN-EP-2016-005 <http://inspirehep.net/record/1421645> 8 citations counted in INSPIRE as of 13 Feb 2020
419. “**Combined search for anomalous pseudoscalar HVV couplings in VH($H \rightarrow b\bar{b}$) production and $H \rightarrow VV$ decay**”
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1602.04305 [hep-ex]
 DOI:10.1016/j.physletb.2016.06.004
Phys. Lett. B **759**, 672 (2016)
 CMS-HIG-14-035, CERN-PH-EP-2015-331 <http://inspirehep.net/record/1421644> 45 citations counted in INSPIRE as of 13 Feb 2020
420. “**Search for direct pair production of scalar top quarks in the single- and dilepton channels in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$** ”
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1602.03169 [hep-ex]
 DOI:10.1007/JHEP07(2016)027, 10.1007/JHEP09(2016)056
JHEP **1607**, 027 (2016), Erratum: [*JHEP* **1609**, 056 (2016)]
 CMS-SUS-14-015, CERN-EP-2016-004 <http://inspirehep.net/record/1420556> 41 citations counted in INSPIRE as of 13 Feb 2020
421. “**Search for supersymmetry in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ in final states with boosted W bosons and b jets using razor variables**”
 V. Khachatryan *et al.* [CMS Collaboration].
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 DOI:10.1103/PhysRevD.93.092009
Phys. Rev. D **93**, no. 9, 092009 (2016)
 CMS-SUS-14-007, CERN-EP-2016-008 <http://inspirehep.net/record/1420551> 14 citations counted in INSPIRE as of 13 Feb 2020
422. “**Azimuthal decorrelation of jets widely separated in rapidity in pp collisions at $\sqrt{s} = 7 \text{ TeV}$** ”
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1601.06713 [hep-ex]
 DOI:10.1007/JHEP08(2016)139

JHEP **1608**, 139 (2016)
CMS-FSQ-12-002, CERN-PH-EP-2015-309 <http://inspirehep.net/record/1416827> 42 citations
counted in INSPIRE as of 13 Feb 2020

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V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1601.06431 [hep-ex]
DOI:10.1140/epjc/s10052-016-4067-z
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CMS-EXO-14-010, CERN-PH-EP-2015-332 <http://inspirehep.net/record/1416821> 55 citations
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424. “Forward?backward asymmetry of Drell?Yan lepton pairs in pp collisions at $\sqrt{s} = 8$ TeV”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1601.04768 [hep-ex]
DOI:10.1140/epjc/s10052-016-4156-z
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counted in INSPIRE as of 13 Feb 2020
425. “Measurement of inclusive jet production and nuclear modifications in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1601.02001 [nucl-ex]
DOI:10.1140/epjc/s10052-016-4205-7
Eur. Phys. J. C **76**, no. 7, 372 (2016)
CMS-HIN-14-001, CERN-PH-EP-2015-334 <http://inspirehep.net/record/1414605> 38 citations
counted in INSPIRE as of 13 Feb 2020
426. “Measurements of t t-bar spin correlations and top quark polarization using dilepton final states in pp collisions at $\sqrt{s} = 8$ TeV”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1601.01107 [hep-ex]
DOI:10.1103/PhysRevD.93.052007
Phys. Rev. D **93**, no. 5, 052007 (2016)
CMS-TOP-14-023, CERN-PH-EP-2015-333 <http://inspirehep.net/record/1413748> 66 citations
counted in INSPIRE as of 13 Feb 2020
427. “Correlations between jets and charged particles in PbPb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1601.00079 [nucl-ex]
DOI:10.1007/JHEP02(2016)156
JHEP **1602**, 156 (2016)
CMS-HIN-14-016, CERN-PH-EP-2015-329 <http://inspirehep.net/record/1412059> 58 citations
counted in INSPIRE as of 13 Feb 2020
428. “Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at $\sqrt{s} = 7$ and 8 TeV”
V. Khachatryan *et al.* [CMS Collaboration].
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DOI:10.1007/JHEP04(2016)005
JHEP **1604**, 005 (2016)
CMS-HIG-14-028, CERN-PH-EP-2015-285 <http://inspirehep.net/record/1411454> 77 citations
counted in INSPIRE as of 13 Feb 2020

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 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1512.08002 [hep-ex]
 DOI:10.1016/j.physletb.2016.05.033
Phys. Lett. B **759**, 9 (2016)
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 counted in INSPIRE as of 13 Feb 2020
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 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1512.06461 [hep-ex]
 DOI:10.1016/j.physletb.2016.05.044
Phys. Lett. B **759**, 36 (2016)
 CMS-HIN-15-002, CERN-PH-EP-2015-302 <http://inspirehep.net/record/1410832> 58 citations
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 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1512.06212 [hep-ex]
 DOI:10.1140/epjc/s10052-016-4083-z
Eur. Phys. J. C **76**, no. 5, 265 (2016)
 CMS-SMP-14-017, CERN-PH-EP-2015-299 <http://inspirehep.net/record/1410826> 30 citations
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 V. Khachatryan *et al.* [CMS Collaboration].
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 DOI:10.1103/PhysRevLett.116.071801
Phys. Rev. Lett. **116**, no. 7, 071801 (2016)
 CMS-EXO-15-001, CERN-PH-EP-2015-317 <http://inspirehep.net/record/1407955> 186 citations
 counted in INSPIRE as of 13 Feb 2020
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 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1512.00815 [hep-ex]
 DOI:10.1140/epjc/s10052-016-3988-x
Eur. Phys. J. C **76**, no. 3, 155 (2016)
 CMS-GEN-14-001, CERN-PH-EP-2015-291 <http://inspirehep.net/record/1407839> 665 citations
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 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1511.09375 [hep-ex]
 DOI:10.1103/PhysRevD.97.099903, 10.1103/PhysRevD.93.052011
Phys. Rev. D **93**, no. 5, 052011 (2016), Erratum: [*Phys. Rev. D* **97**, no. 9, 099903 (2018)]
 CMS-EXO-12-054, CERN-PH-EP-2015-297 <http://inspirehep.net/record/1407148> 43 citations
 counted in INSPIRE as of 13 Feb 2020
435. “Measurement of Spin Correlations in $t\bar{t}$ Production using the Matrix Element Method in the Muon+Jets Final State in pp Collisions at $\sqrt{s} = 8$ TeV”
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1511.06170 [hep-ex]
 DOI:10.1016/j.physletb.2016.05.005
Phys. Lett. B **758**, 321 (2016)

CMS-TOP-13-015, CERN-PH-EP-2015-289 <http://inspirehep.net/record/1405439> 28 citations counted in INSPIRE as of 13 Feb 2020

436. “Search for Anomalous Single Top Quark Production in Association with a Photon in pp Collisions at $\sqrt{s} = 8 \text{ TeV}$ ”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1511.03951 [hep-ex]
DOI:10.1007/JHEP04(2016)035
JHEP **1604**, 035 (2016)
CMS-TOP-14-003, CERN-PH-EP-2015-287 <http://inspirehep.net/record/1404159> 71 citations counted in INSPIRE as of 13 Feb 2020
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V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1511.03610 [hep-ex]
DOI:10.1016/j.physletb.2016.05.003
Phys. Lett. B **758**, 296 (2016)
CMS-HIG-14-033, CERN-PH-EP-2015-284 <http://inspirehep.net/record/1403990> 38 citations counted in INSPIRE as of 13 Feb 2020
438. “Measurement of Top Quark Polarisation in T-Channel Single Top Quark Production”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1511.02138 [hep-ex]
DOI:10.1007/JHEP04(2016)073
JHEP **1604**, 073 (2016)
CMS-TOP-13-001, CERN-PH-EP-2015-282 <http://inspirehep.net/record/1403169> 45 citations counted in INSPIRE as of 13 Feb 2020
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V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1511.01407 [hep-ex]
DOI:10.1007/JHEP03(2016)125
JHEP **1603**, 125 (2016)
CMS-EXO-14-015, CERN-PH-EP-2015-281 <http://inspirehep.net/record/1402803> 31 citations counted in INSPIRE as of 13 Feb 2020
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V. Khachatryan *et al.* [CMS Collaboration].
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DOI:10.1088/1748-0221/11/01/P01019
JINST **11**, no. 01, P01019 (2016)
CMS-TAU-14-001, CERN-PH-EP-2015-261 <http://inspirehep.net/record/1400805> 197 citations counted in INSPIRE as of 13 Feb 2020
441. “Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into τ leptons in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ ”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1510.06534 [hep-ex]
DOI:10.1007/JHEP01(2016)079
JHEP **1601**, 079 (2016)
CMS-HIG-14-019, CERN-PH-EP-2015-264 <http://inspirehep.net/record/1399359> 53 citations counted in INSPIRE as of 13 Feb 2020
442. “Measurement of the top quark pair production cross section in proton-proton collisions at $\sqrt(s) = 13 \text{ TeV}$ ”
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1510.05302 [hep-ex]

DOI:10.1103/PhysRevLett.116.052002
Phys. Rev. Lett. **116**, no. 5, 052002 (2016)
CMS-TOP-15-003, CERN-PH-EP-2015-280 <http://inspirehep.net/record/1398582> 91 citations
counted in INSPIRE as of 13 Feb 2020

443. “**Search for a light charged Higgs boson decaying to $c\bar{s}$ in pp collisions at $\sqrt{s} = 8 \text{ TeV}$**
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1510.04252 [hep-ex]
DOI:10.1007/JHEP12(2015)178
JHEP **1512**, 178 (2015)
CMS-HIG-13-035, CERN-PH-EP-2015-266 <http://inspirehep.net/record/1397832> 87 citations
counted in INSPIRE as of 13 Feb 2020
444. “**Transverse momentum spectra of inclusive b jets in pPb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$**
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1510.03373 [nucl-ex]
DOI:10.1016/j.physletb.2016.01.010
Phys. Lett. B **754**, 59 (2016)
CMS-HIN-14-007, CERN-PH-EP-2015-205 <http://inspirehep.net/record/1397180> 44 citations
counted in INSPIRE as of 13 Feb 2020
445. “**Measurement of $t\bar{t}$ production with additional jet activity, including b quark jets, in the dilepton decay channel using pp collisions at $\sqrt{s} = 8 \text{ TeV}$**
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1510.03072 [hep-ex]
DOI:10.1140/epjc/s10052-016-4105-x
Eur. Phys. J. C **76**, no. 7, 379 (2016)
CMS-TOP-12-041, CERN-PH-EP-2015-240 <http://inspirehep.net/record/1397174> 79 citations
counted in INSPIRE as of 13 Feb 2020
446. “**Measurement of long-range near-side two-particle angular correlations in pp collisions at $\sqrt{s} = 13 \text{ TeV}$**
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1510.03068 [nucl-ex]
DOI:10.1103/PhysRevLett.116.172302
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CMS-FSQ-15-002, CERN-PH-EP-2015-271 <http://inspirehep.net/record/1397173> 140 citations
counted in INSPIRE as of 13 Feb 2020
447. “**Searches for a heavy scalar boson H decaying to a pair of 125 GeV Higgs bosons hh or for a heavy pseudoscalar boson A decaying to Zh, in the final states with $h \rightarrow \tau\tau$**
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1510.01181 [hep-ex]
DOI:10.1016/j.physletb.2016.01.056
Phys. Lett. B **755**, 217 (2016)
CMS-HIG-14-034, CERN-PH-EP-2015-211 <http://inspirehep.net/record/1396141> 112 citations
counted in INSPIRE as of 13 Feb 2020
448. “**Observation of top quark pairs produced in association with a vector boson in pp collisions at $\sqrt{s} = 8 \text{ TeV}$**
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1510.01131 [hep-ex]
DOI:10.1007/JHEP01(2016)096
JHEP **1601**, 096 (2016)
CMS-TOP-14-021, CERN-PH-EP-2015-248 <http://inspirehep.net/record/1396140> 82 citations
counted in INSPIRE as of 13 Feb 2020

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 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1509.09029 [nucl-ex]
 DOI:10.1007/JHEP01(2016)006
JHEP **1601**, 006 (2016)
 CMS-HIN-14-010, CERN-PH-EP-2015-260 <http://inspirehep.net/record/1395457> 77 citations
 counted in INSPIRE as of 13 Feb 2020
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 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1509.08159 [hep-ex]
 DOI:10.1007/JHEP06(2016)177
JHEP **1606**, 177 (2016)
 CMS-HIG-14-027, CERN-PH-EP-2015-255 <http://inspirehep.net/record/1395096> 42 citations
 counted in INSPIRE as of 13 Feb 2020
451. “**Search for the production of an excited bottom quark decaying to tW in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$** ”
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1509.08141 [hep-ex]
 DOI:10.1007/JHEP01(2016)166
JHEP **1601**, 166 (2016)
 CMS-B2G-14-005, CERN-PH-EP-2015-246 <http://inspirehep.net/record/1395094> 18 citations
 counted in INSPIRE as of 13 Feb 2020
452. “**Measurement of the $t\bar{t}$ production cross section in the all-jets final state in pp collisions at $\sqrt{s} = 8 \text{ TeV}$** ”
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1509.06076 [hep-ex]
 DOI:10.1140/epjc/s10052-016-3956-5
Eur. Phys. J. C **76**, no. 3, 128 (2016)
 CMS-TOP-14-018, CERN-PH-EP-2015-243 <http://inspirehep.net/record/1394164> 55 citations
 counted in INSPIRE as of 13 Feb 2020
453. “**Search for $W' \rightarrow tb$ in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$** ”
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1509.06051 [hep-ex]
 DOI:10.1007/JHEP02(2016)122
JHEP **1602**, 122 (2016)
 CMS-B2G-12-009, CERN-PH-EP-2015-231 <http://inspirehep.net/record/1394163> 26 citations
 counted in INSPIRE as of 13 Feb 2020
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 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1509.04177 [hep-ex]
 DOI:10.1103/PhysRevD.93.012003
Phys. Rev. D **93**, no. 1, 012003 (2016)
 CMS-B2G-13-005, CERN-PH-EP-2015-228 <http://inspirehep.net/record/1393276> 133 citations
 counted in INSPIRE as of 13 Feb 2020
455. “**Measurement of the top quark mass using proton-proton data at $\sqrt{s} = 7 \text{ and } 8 \text{ TeV}$** ”
 V. Khachatryan *et al.* [CMS Collaboration].
 arXiv:1509.04044 [hep-ex]
 DOI:10.1103/PhysRevD.93.072004

Phys. Rev. D **93**, no. 7, 072004 (2016)
CMS-TOP-14-022, CERN-PH-EP-2015-234 <http://inspirehep.net/record/1393269> 243 citations
counted in INSPIRE as of 13 Feb 2020

456. “**Measurement of the inelastic cross section in proton?lead collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$**
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1509.03893 [hep-ex]
DOI:10.1016/j.physletb.2016.06.027
Phys. Lett. B **759**, 641 (2016)
CMS-FSQ-13-006, CERN-PH-EP-2015-210 <http://inspirehep.net/record/1393261> 15 citations
counted in INSPIRE as of 13 Feb 2020
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V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1509.03750 [hep-ex]
DOI:10.1103/PhysRevD.95.039906, 10.1103/PhysRevD.93.032005
Phys. Rev. D **93**, no. 3, 032005 (2016), Erratum: [Phys. Rev. D **95**, no. 3, 039906 (2017)]
CMS-EXO-12-043, CERN-PH-EP-2015-149 <http://inspirehep.net/record/1393258> 38 citations
counted in INSPIRE as of 13 Feb 2020
458. “**Search for pair production of first and second generation leptoquarks in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$**
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1509.03744 [hep-ex]
DOI:10.1103/PhysRevD.93.032004
Phys. Rev. D **93**, no. 3, 032004 (2016)
CMS-EXO-12-041, CERN-PH-EP-2015-197 <http://inspirehep.net/record/1393257> 75 citations
counted in INSPIRE as of 13 Feb 2020
459. “**Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at $\sqrt{s} = 8 \text{ TeV}$**
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1508.07819 [hep-ex]
DOI:10.1140/epjc/s10052-015-3853-3
Eur. Phys. J. C **76**, no. 1, 13 (2016)
CMS-HIG-14-016, CERN-PH-EP-2015-195 <http://inspirehep.net/record/1391147> 98 citations
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460. “**Search for a charged Higgs boson in pp collisions at $\sqrt{s} = 8 \text{ TeV}$**
V. Khachatryan *et al.* [CMS Collaboration].
arXiv:1508.07774 [hep-ex]
DOI:10.1007/JHEP11(2015)018
JHEP **1511**, 018 (2015)
CMS-HIG-14-023, CERN-PH-EP-2015-221 <http://inspirehep.net/record/1391146> 176 citations
counted in INSPIRE as of 13 Feb 2020
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arXiv:1508.07628 [hep-ex]
DOI:10.1007/JHEP11(2015)189
JHEP **1511**, 189 (2015)
CMS-SUS-14-005, CERN-PH-EP-2015-213 <http://inspirehep.net/record/1391140> 29 citations
counted in INSPIRE as of 13 Feb 2020
462. “**Study of B Meson Production in p+Pb Collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$ Using Exclusive**

Hadronic Decays”

V. Khachatryan *et al.* [CMS Collaboration].

arXiv:1508.06678 [nucl-ex]

DOI:10.1103/PhysRevLett.116.032301

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463. “**Search for W’ decaying to tau lepton and neutrino in proton-proton collisions at $\sqrt{(s)} = 8 \text{ TeV}$** ”
- V. Khachatryan *et al.* [CMS Collaboration].
- arXiv:1508.04308 [hep-ex]
- DOI:10.1016/j.physletb.2016.02.002
- Phys. Lett. B **755**, 196 (2016)
- CMS-EXO-12-011, CERN-PH-EP-2015-190 <http://inspirehep.net/record/1388363> 30 citations counted in INSPIRE as of 13 Feb 2020
464. “**Measurement of the charge asymmetry in top quark pair production in pp collisions at $\sqrt{(s)} = 8 \text{ TeV}$ using a template method”**
- V. Khachatryan *et al.* [CMS Collaboration].
- arXiv:1508.03862 [hep-ex]
- DOI:10.1103/PhysRevD.93.034014
- Phys. Rev. D **93**, no. 3, 034014 (2016)
- CMS-TOP-13-013, CERN-PH-EP-2015-189 <http://inspirehep.net/record/1388178> 40 citations counted in INSPIRE as of 13 Feb 2020
465. “**Search for neutral MSSM Higgs bosons decaying to $\mu^+ \mu^-$ in pp collisions at $\sqrt{s} = 7$ and 8 TeV”**
- V. Khachatryan *et al.* [CMS Collaboration].
- arXiv:1508.01437 [hep-ex]
- DOI:10.1016/j.physletb.2015.11.042
- Phys. Lett. B **752**, 221 (2016)
- CMS-HIG-13-024, CERN-PH-EP-2015-148 <http://inspirehep.net/record/1386854> 35 citations counted in INSPIRE as of 13 Feb 2020
466. “**Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ ”**
- V. Khachatryan *et al.* [CMS Collaboration].
- arXiv:1508.01218 [hep-ex]
- DOI:10.1016/j.physletb.2016.03.039
- Phys. Lett. B **757**, 6 (2016)
- CMS-SUS-14-013, CERN-PH-EP-2015-169 <http://inspirehep.net/record/1386851> 17 citations counted in INSPIRE as of 13 Feb 2020
467. “**Angular analysis of the decay $B^0 \rightarrow K^{*0} \mu^+ \mu^-$ from pp collisions at $\sqrt{s} = 8 \text{ TeV}$ ”**
- V. Khachatryan *et al.* [CMS Collaboration].
- arXiv:1507.08126 [hep-ex]
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