

Publication List from all Collaborations and Experiments

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A.M. Sirunyan et al., **Measurement of the single top quark and antiquark production cross sections in the t channel and their ratio in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Lett. B* 800 (2020) 135042, doi:[10.1016/j.physletb.2019.135042](https://doi.org/10.1016/j.physletb.2019.135042), arXiv:[1812.10514](https://arxiv.org/abs/1812.10514) [hep-ex]

A.M. Sirunyan et al., **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**, *JHEP*. 01 (2020) 096, doi:[10.1007/JHEP01\(2020\)096](https://doi.org/10.1007/JHEP01(2020)096), arXiv:[1908.09206](https://arxiv.org/abs/1908.09206) [hep-ex]

A.M. Sirunyan et al., **Extraction and validation of a new set of CMS PYTHIA8 tunes from underlying-event measurements**, *Eur. Phys. J. C* 80 (2020) 4, doi:[10.1140/epjc/s10052-019-7499-4](https://doi.org/10.1140/epjc/s10052-019-7499-4), arXiv:[1903.12179](https://arxiv.org/abs/1903.12179) [hep-ex]

A.M. Sirunyan et al., **Observation of nuclear modifications in W^\pm boson production in pPb collisions at $\sqrt{s_{NN}} = 8.16$ TeV**, *Phys. Lett. B* 800 (2020) 135048, doi:[10.1016/j.physletb.2019.135048](https://doi.org/10.1016/j.physletb.2019.135048), arXiv:[1905.01486](https://arxiv.org/abs/1905.01486) [hep-ex]

A.M. Sirunyan et al., **Observation of the $\Lambda_b^0 \rightarrow J/\psi \Lambda \phi$ decay in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Lett. B* 802 (2020) 135203, doi:[10.1016/j.physletb.2020.135203](https://doi.org/10.1016/j.physletb.2020.135203), arXiv:[1911.03789](https://arxiv.org/abs/1911.03789) [hep-ex]

A.M. Sirunyan et al., **Measurement of electroweak production of a W boson in association with two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Eur. Phys. J. C* 80 (2020) 43, doi:[10.1140/epjc/s10052-019-7585-7](https://doi.org/10.1140/epjc/s10052-019-7585-7), arXiv:[1903.04040](https://arxiv.org/abs/1903.04040) [hep-ex]

A.M. Sirunyan et al., **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**, *Phys. Lett. B* 800 (2020) 135087, doi:[10.1016/j.physletb.2019.135087](https://doi.org/10.1016/j.physletb.2019.135087), arXiv:[1907.07235](https://arxiv.org/abs/1907.07235) [hep-ex]

A.M. Sirunyan et al., **Search for top squark pair production in a final state with two tau leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *JHEP*. 02 (2020) 015, doi:[10.1007/JHEP02\(2020\)015](https://doi.org/10.1007/JHEP02(2020)015), arXiv:[1910.12932](https://arxiv.org/abs/1910.12932) [hep-ex]

A.M. Sirunyan et al., **Search for supersymmetry with a compressed mass spectrum in events with a soft τ lepton, a highly energetic jet, and large missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Rev. Lett.* 124 (2020) 041803, doi:[10.1103/PhysRevLett.124.041803](https://doi.org/10.1103/PhysRevLett.124.041803), arXiv:[1910.01185](https://arxiv.org/abs/1910.01185) [hep-ex]

A.M. Sirunyan et al., **Multiparticle correlation studies in pPb collisions at $\sqrt{s_{NN}} = 8.16$ TeV**, *Phys. Rev. C* 101 (2020) 014912, doi:[10.1103/PhysRevC.101.014912](https://doi.org/10.1103/PhysRevC.101.014912), arXiv:[1904.11519](https://arxiv.org/abs/1904.11519) [hep-ex]

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A.M. Sirunyan et al., **Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Eur. Phys. J. C* 80 (2020) 75, doi:[10.1140/epjc/s10052-019-7593-7](https://doi.org/10.1140/epjc/s10052-019-7593-7), arXiv:[1908.06463](https://arxiv.org/abs/1908.06463) [hep-ex]

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A.M. Sirunyan et al., **Search for an excited lepton that decays via a contact interaction to a lepton and two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2020), arXiv:[2001.04521](https://arxiv.org/abs/2001.04521) [hep-ex]

- A.M. Sirunyan et al., **Study of excited Λ_b^0 states decaying to $\Lambda_b^0 \pi^+ \pi^-$ in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2020), arXiv:2001.06533 [hep-ex]
- A.M. Sirunyan et al., **Search for charged Higgs bosons decaying into a top and a bottom quark in the all-jet final state of pp collisions at $\sqrt{s} = 13$ TeV**, (2020), arXiv:2001.07763 [hep-ex]
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- A.M. Sirunyan et al., **A measurement of the Higgs boson mass in the diphoton decay channel**, (2020), arXiv:2002.06398 [hep-ex]
- A.M. Sirunyan et al., **Search for physics beyond the standard model in events with jets and two same-sign or at least three charged leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2020), arXiv:2001.10086 [hep-ex]
- M. Aaboud et al., **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, *JHEP.* 05 (2019) 088, doi:10.1007/JHEP05(2019)088, arXiv:1902.07158 [hep-ex]
- A.M. Sirunyan et al., **Measurement of the top quark polarization and $t\bar{t}$ spin correlations using dilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Rev. D* 100 (2019) 072002, doi:10.1103/PhysRevD.100.072002, arXiv:1907.03729 [hep-ex]
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- A.M. Sirunyan et al., **Probing the chiral magnetic wave in pPb and PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV using charge-dependent azimuthal anisotropies**, *Phys. Rev. C* 100 (2019) 064908, doi:10.1103/PhysRevC.100.064908, arXiv:1708.08901 [nucl-ex]
- A.M. Sirunyan et al., **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**, *Phys. Lett. B* 793 (2019) 320–347, doi:10.1016/j.physletb.2019.03.064, arXiv:1811.08459 [hep-ex]
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- A.M. Sirunyan et al., **Search for the associated production of the Higgs boson and a vector boson in proton-proton collisions at $\sqrt{s} = 13$ TeV via Higgs boson decays to τ leptons**, *JHEP.* 06 (2019) 093, doi:10.1007/JHEP06(2019)093, arXiv:1809.03590 [hep-ex]
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