

Publication List from all Collaborations and Experiments

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- A.M. Sirunyan et al., **Search for direct pair production of supersymmetric partners to the τ lepton in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Eur. Phys. J. C* 80 (2020) 189, doi:[10.1140/epjc/s10052-020-7739-7](https://doi.org/10.1140/epjc/s10052-020-7739-7), arXiv:[1907.13179](https://arxiv.org/abs/1907.13179) [hep-ex]
- A.M. Sirunyan et al., **Measurement of top quark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *JHEP*. 03 (2020) 056, doi:[10.1007/JHEP03\(2020\)056](https://doi.org/10.1007/JHEP03(2020)056), arXiv:[1907.11270](https://arxiv.org/abs/1907.11270) [hep-ex]
- 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., **Measurement of the χ_{c1} and χ_{c2} polarizations in proton-proton collisions at $\sqrt{s} = 8$ TeV**, *Phys. Rev. Lett.* 124 (2020) 162002, doi:[10.1103/PhysRevLett.124.162002](https://doi.org/10.1103/PhysRevLett.124.162002), arXiv:[1912.07706](https://arxiv.org/abs/1912.07706) [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., **Search for physics beyond the standard model in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *JHEP*. 03 (2020) 051, doi:[10.1007/JHEP03\(2020\)051](https://doi.org/10.1007/JHEP03(2020)051), arXiv:[1911.04968](https://arxiv.org/abs/1911.04968) [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., **Calibration of the CMS hadron calorimeters using proton-proton collision data at $\sqrt{s} = 13$ TeV**, *JINST*. 15 (2020) P05002, doi:[10.1088/1748-0221/15/05/P05002](https://doi.org/10.1088/1748-0221/15/05/P05002), arXiv:[1910.00079](https://arxiv.org/abs/1910.00079) [physics.ins-det]
- 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]
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- A.M. Sirunyan et al., **Production of Λ_c^+ baryons in proton-proton and lead-lead collisions at $\sqrt{s_{NN}} = 5.02$ TeV**, *Phys. Lett. B* 803 (2020) 135328, doi:[10.1016/j.physletb.2020.135328](https://doi.org/10.1016/j.physletb.2020.135328), arXiv:[1906.03322](https://arxiv.org/abs/1906.03322) [hep-ex]
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- A.M. Sirunyan et al., **Measurement of the $t\bar{t}b\bar{b}$ production cross section in the all-jet final state in pp collisions at $\sqrt{s} = 13$ TeV**, *Phys. Lett. B* 803 (2020) 135285, doi:[10.1016/j.physletb.2020.135285](https://doi.org/10.1016/j.physletb.2020.135285), arXiv:[1909.05306](https://arxiv.org/abs/1909.05306) [hep-ex]
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- A.M. Sirunyan et al., **Combined search for supersymmetry with photons in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Lett. B* 801 (2020) 135183, doi:[10.1016/j.physletb.2019.135183](https://doi.org/10.1016/j.physletb.2019.135183), arXiv:[1907.00857](https://arxiv.org/abs/1907.00857) [hep-ex]
- A.M. Sirunyan et al., **Search for lepton flavour violating decays of a neutral heavy Higgs boson to $\mu\tau$ and $e\tau$ in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *JHEP*. 03 (2020) 103, doi:[10.1007/JHEP03\(2020\)103](https://doi.org/10.1007/JHEP03(2020)103), arXiv:[1911.10267](https://arxiv.org/abs/1911.10267) [hep-ex]
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- A.M. Sirunyan et al., **Search for new neutral Higgs bosons through the $H \rightarrow ZA \rightarrow \ell^+\ell^-b\bar{b}$ process in pp collisions at $\sqrt{s} = 13$ TeV**, *JHEP*. 03 (2020) 055, doi:[10.1007/JHEP03\(2020\)055](https://doi.org/10.1007/JHEP03(2020)055), arXiv:[1911.03781](https://arxiv.org/abs/1911.03781) [hep-ex]
- 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 a heavy pseudoscalar Higgs boson decaying into a 125 GeV Higgs boson and a Z boson in final states with two tau and two light leptons at $\sqrt{s} = 13$ TeV**, *JHEP*. 03 (2020) 065, doi:[10.1007/JHEP03\(2020\)065](https://doi.org/10.1007/JHEP03(2020)065), arXiv:[1910.11634](https://arxiv.org/abs/1910.11634) [hep-ex]
- A.M. Sirunyan et al., **Searches for physics beyond the standard model with the M_{T2} variable in hadronic final states with and without disappearing tracks in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Eur. Phys. J. C* 80 (2020) 3, doi:[10.1140/epjc/s10052-019-7493-x](https://doi.org/10.1140/epjc/s10052-019-7493-x), arXiv:[1909.03460](https://arxiv.org/abs/1909.03460) [hep-ex]

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