

Publication List from all Collaborations and Experiments

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- A.M. Sirunyan et al., **Evidence for electroweak production of four charged leptons and two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Lett. B* 812 (2021) 135992, doi:[10.1016/j.physletb.2020.135992](https://doi.org/10.1016/j.physletb.2020.135992), arXiv:[2008.07013](https://arxiv.org/abs/2008.07013) [hep-ex]
- A.M. Sirunyan et al., **Measurements of production cross sections of polarized same-sign W boson pairs in association with two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Lett. B* 812 (2021) 136018, doi:[10.1016/j.physletb.2020.136018](https://doi.org/10.1016/j.physletb.2020.136018), arXiv:[2009.09429](https://arxiv.org/abs/2009.09429) [hep-ex]
- G. Aad et al., **Combination of the W boson polarization measurements in top quark decays using ATLAS and CMS data at $\sqrt{s} = 8$ TeV**, *JHEP*. 08 (2020) 051, doi:[10.1007/JHEP08\(2020\)051](https://doi.org/10.1007/JHEP08(2020)051), arXiv:[2005.03799](https://arxiv.org/abs/2005.03799) [hep-ex]
- 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]
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- V. Khachatryan et al., **The very forward CASTOR calorimeter of the CMS experiment**, (2020). [http://arxiv.org/abs/2011.01185](https://arxiv.org/abs/2011.01185), arXiv:[2011.01185](https://arxiv.org/abs/2011.01185) [physics.ins-det]
- 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., **Constraints on the χ_{c1} versus 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]
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- 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]
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- 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., **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]
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- A.M. Sirunyan et al., **Measurement of differential cross sections and charge ratios for t-channel single top quark production in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Eur. Phys. J. C* 80 (2020) 370, doi:[10.1140/epjc/s10052-020-7858-1](https://doi.org/10.1140/epjc/s10052-020-7858-1), arXiv:[1907.08330](https://arxiv.org/abs/1907.08330) [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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