

# Publication List

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- A.M. Sirunyan et al., **Search for the lepton flavor violating decay  $\tau \rightarrow 3 \mu$  in proton-proton collisions at  $\sqrt{s} = 13$  TeV**, *JHEP*. 01 (2021) 163, doi:[10.1007/JHEP01\(2021\)163](https://doi.org/10.1007/JHEP01(2021)163), arXiv:[2007.05658](https://arxiv.org/abs/2007.05658) [hep-ex]
- V. Khachatryan et al., **The very forward CASTOR calorimeter of the CMS experiment**, *JINST*. 16 (2021) P02010, doi:[10.1088/1748-0221/16/02/P02010](https://doi.org/10.1088/1748-0221/16/02/P02010), arXiv:[2011.01185](https://arxiv.org/abs/2011.01185) [physics.ins-det]
- A.M. Sirunyan et al., **Correlations of azimuthal anisotropy Fourier harmonics with subevent cumulants in  $pPb$  collisions at  $\sqrt{s_{NN}} = 8.16$  TeV**, *Phys. Rev. C* 103 (2021) 014902, doi:[10.1103/PhysRevC.103.014902](https://doi.org/10.1103/PhysRevC.103.014902), arXiv:[1905.09935](https://arxiv.org/abs/1905.09935) [hep-ex]
- 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., **Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at  $\sqrt{s} = 13$  TeV**, *Eur. Phys. J. C* 81 (2021) 13, doi:[10.1140/epjc/s10052-020-08739-5](https://doi.org/10.1140/epjc/s10052-020-08739-5), arXiv:[2008.04735](https://arxiv.org/abs/2008.04735) [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]
- A.M. Sirunyan et al., **Studies of charm and beauty hadron long-range correlations in pp and pPb collisions at LHC energies**, *Phys. Lett. B* 813 (2021) 136036, doi:[10.1016/j.physletb.2020.136036](https://doi.org/10.1016/j.physletb.2020.136036), arXiv:[2009.07065](https://arxiv.org/abs/2009.07065) [hep-ex]
- A.M. Sirunyan et al., **Evidence for Higgs boson decay to a pair of muons**, *JHEP*. 01 (2021) 148, doi:[10.1007/JHEP01\(2021\)148](https://doi.org/10.1007/JHEP01(2021)148), arXiv:[2009.04363](https://arxiv.org/abs/2009.04363) [hep-ex]
- A.M. Sirunyan et al., **Search for top squark pair production using dilepton final states in  $pp$  collision data collected at  $\sqrt{s} = 13$  TeV**, *Eur. Phys. J. C* 81 (2021) 3, doi:[10.1140/epjc/s10052-020-08701-5](https://doi.org/10.1140/epjc/s10052-020-08701-5), arXiv:[2008.05936](https://arxiv.org/abs/2008.05936) [hep-ex]
- A.M. Sirunyan et al., **Measurements of the differential cross sections of the production of Z+jets and  $\gamma$ +jets and of Z boson emission collinear with a jet in pp collisions at  $\sqrt{s} = 13$  TeV**, (2021). [http://arxiv.org/abs/2102.02238](https://arxiv.org/abs/2102.02238), arXiv:[2102.02238](https://arxiv.org/abs/2102.02238) [hep-ex]
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- A.M. Sirunyan et al., **In-medium modification of dijets in PbPb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV**, (2021). [http://arxiv.org/abs/2101.04720](https://arxiv.org/abs/2101.04720), arXiv:[2101.04720](https://arxiv.org/abs/2101.04720) [hep-ex]
- A.M. Sirunyan et al., **Measurements of angular distance and momentum ratio distributions in three-jet and Z + two-jet final states in pp collisions**, (2021). [http://arxiv.org/abs/2102.08816](https://arxiv.org/abs/2102.08816), arXiv:[2102.08816](https://arxiv.org/abs/2102.08816) [hep-ex]
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- A.M. Sirunyan et al., **Observation of a new excited beauty strange baryon decaying to  $\Xi_b^- \pi^+ \pi^-$** , (2021). <http://arxiv.org/abs/2102.04524>, arXiv:2102.04524 [hep-ex]
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- O. Gutsche et al., **Striped Data Analysis Framework**, *EPJ Web Conf.* 245 (2020) 06042, doi:10.1051/epjconf/202024506042
- 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, arXiv:1812.10514 [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, arXiv:1903.12179 [hep-ex]
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