

Publication List from all Collaborations and Experiments

Oliver Gutsche

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- 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.* C80 (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., **Search for the lepton flavor violating decay $\tau \rightarrow 3 \mu$ in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2020), arXiv:[2007.05658](https://arxiv.org/abs/2007.05658) [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.* B800 (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]
- 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., **Determination of the strong coupling constant $\alpha_S(m_Z)$ from measurements of inclusive W^\pm and Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 7$ and 8 TeV**, *JHEP*. 06 (2020) 018, doi:[10.1007/JHEP06\(2020\)018](https://doi.org/10.1007/JHEP06(2020)018), arXiv:[1912.04387](https://arxiv.org/abs/1912.04387) [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.* C80 (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., **Studies of charm quark diffusion inside jets using PbPb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV**, *Phys. Rev. Lett.* 125 (2020) 102001, doi:[10.1103/PhysRevLett.125.102001](https://doi.org/10.1103/PhysRevLett.125.102001), arXiv:[1911.01461](https://arxiv.org/abs/1911.01461) [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.* B800 (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.* B802 (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]
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- A.M. Sirunyan et al., **Search for direct top squark pair production in events with one lepton, jets, and missing transverse momentum at 13 TeV with the CMS experiment**, *JHEP*. 05 (2020) 032, doi:[10.1007/JHEP05\(2020\)032](https://doi.org/10.1007/JHEP05(2020)032), arXiv:[1912.08887](https://arxiv.org/abs/1912.08887) [hep-ex]
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- A.M. Sirunyan et al., **Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ and 5.02 TeV**, *Eur. Phys. J. C* 80 (2020) 534, doi:[10.1140/epjc/s10052-020-7834-9](https://doi.org/10.1140/epjc/s10052-020-7834-9), arXiv:[1910.08789](https://arxiv.org/abs/1910.08789) [hep-ex]
- A.M. Sirunyan et al., **A multi-dimensional search for new heavy resonances decaying to boosted WW, WZ, or ZZ boson pairs in the dijet final state at 13 TeV**, *Eur. Phys. J. C* 80 (2020) 237, doi:[10.1140/epjc/s10052-020-7773-5](https://doi.org/10.1140/epjc/s10052-020-7773-5), arXiv:[1906.05977](https://arxiv.org/abs/1906.05977) [hep-ex]
- 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., **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]
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