

Publication List

Oliver Gutsche

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- L. Bauerdick et al., **HEP Software Foundation Community White Paper Working Group - Data Analysis and Interpretation**, (2018), arXiv:[1804.03983](#) [[physics.comp-ph](#)]
- A.M. Sirunyan et al., **Observation of proton-tagged, central (semi)exclusive production of high-mass lepton pairs in pp collisions at 13 TeV with the CMS-TOTEM precision proton spectrometer**, *Submitted to: JHEP*. (2018), arXiv:[1803.04496](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Search for massive resonances decaying into WW , WZ , ZZ , qW , and qZ with dijet final states at $\sqrt{s} = 13\text{TeV}$** , *Phys. Rev. D* 97 (2018) 072006, doi:[10.1103/PhysRevD.97.072006](#), arXiv:[1708.05379](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Measurement of the Splitting Function in pp and Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02\text{ TeV}$** , *Phys. Rev. Lett.* 120 (2018) 142302, doi:[10.1103/PhysRevLett.120.142302](#), arXiv:[1708.09429](#) [[nucl-ex](#)]
- A.M. Sirunyan et al., **Inclusive search for a highly boosted Higgs boson decaying to a bottom quark-antiquark pair**, *Phys. Rev. Lett.* 120 (2018) 071802, doi:[10.1103/PhysRevLett.120.071802](#), arXiv:[1709.05543](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Search for natural supersymmetry in events with top quark pairs and photons in pp collisions at $\sqrt{s} = 8\text{ TeV}$** , *JHEP*. 03 (2018) 167, doi:[10.1007/JHEP03\(2018\)167](#), arXiv:[1707.03325](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Measurement of angular parameters from the decay $B^0 \rightarrow K^{*0} \mu^+ \mu^-$ in proton-proton collisions at $\sqrt{s} = 8\text{ TeV}$** , *Phys. Lett. B* 781 (2018) 517–541, doi:[10.1016/j.physletb.2018.04.030](#), arXiv:[1710.02846](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Search for Higgs boson pair production in events with two bottom quarks and two tau leptons in proton–proton collisions at $\sqrt{s} = 13\text{TeV}$** , *Phys. Lett. B* 778 (2018) 101–127, doi:[10.1016/j.physletb.2018.01.001](#), arXiv:[1707.02909](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Search for supersymmetry with Higgs boson to diphoton decays using the razor variables at $\sqrt{s} = 13\text{ TeV}$** , *Phys. Lett. B* 779 (2018) 166–190, doi:[10.1016/j.physletb.2017.12.069](#), arXiv:[1709.00384](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Evidence for the Higgs boson decay to a bottom quark–antiquark pair**, *Phys. Lett. B* 780 (2018) 501–532, doi:[10.1016/j.physletb.2018.02.050](#), arXiv:[1709.07497](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Identification of heavy-flavour jets with the CMS detector in pp collisions at 13 TeV**, *JINST*. 13 (2018) P05011, doi:[10.1088/1748-0221/13/05/P05011](#), arXiv:[1712.07158](#) [[physics.ins-det](#)]
- A.M. Sirunyan et al., **Search for excited quarks of light and heavy flavor in γ +jet final states in proton–proton collisions at $\sqrt{s} = 13\text{TeV}$** , *Phys. Lett. B* 781 (2018) 390–411, doi:[10.1016/j.physletb.2018.04.007](#), arXiv:[1711.04652](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Search for resonant and nonresonant Higgs boson pair production in the $b\bar{b}l\ell\nu\ell\nu$ final state in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$** , *JHEP*. 01 (2018) 054, doi:[10.1007/JHEP01\(2018\)054](#), arXiv:[1708.04188](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Constraints on the double-parton scattering cross section from same-sign W boson pair production in proton-proton collisions at $\sqrt{s} = 8\text{ TeV}$** , *JHEP*. 02 (2018) 032, doi:[10.1007/JHEP02\(2018\)032](#), arXiv:[1712.02280](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Search for supersymmetry in events with at least three electrons or muons, jets, and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$** , *JHEP*. 02 (2018) 067, doi:[10.1007/JHEP02\(2018\)067](#), arXiv:[1710.09154](#) [[hep-ex](#)]
- A.M. Sirunyan et al., **Measurement of differential cross sections in the kinematic angular variable ϕ^* for inclusive Z boson production in pp collisions at $\sqrt{s} = 8\text{ TeV}$** , *JHEP*. 03 (2018) 172, doi:[10.1007/JHEP03\(2018\)172](#), arXiv:[1710.07955](#) [[hep-ex](#)]

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- A.M. Sirunyan et al., **Search for ZZ resonances in the $2\gamma\gamma\nu$ final state in proton-proton collisions at 13 TeV**, *JHEP*. 03 (2018) 003, doi:[10.1007/JHEP03\(2018\)003](https://doi.org/10.1007/JHEP03(2018)003), arXiv:[1711.04370](https://arxiv.org/abs/1711.04370) [hep-ex]
- A.M. Sirunyan et al., **Observation of the Higgs boson decay to a pair of τ leptons with the CMS detector**, *Phys. Lett. B* 779 (2018) 283–316, doi:[10.1016/j.physletb.2018.02.004](https://doi.org/10.1016/j.physletb.2018.02.004), arXiv:[1708.00373](https://arxiv.org/abs/1708.00373) [hep-ex]
- A.M. Sirunyan et al., **Search for the pair production of third-generation squarks with two-body decays to a bottom or charm quark and a neutralino in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Lett. B* 778 (2018) 263–291, doi:[10.1016/j.physletb.2018.01.012](https://doi.org/10.1016/j.physletb.2018.01.012), arXiv:[1707.07274](https://arxiv.org/abs/1707.07274) [hep-ex]
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- A.M. Sirunyan et al., **Suppression of Excited Υ States Relative to the Ground State in Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV**, *Phys. Rev. Lett.* 120 (2018) 142301, doi:[10.1103/PhysRevLett.120.142301](https://doi.org/10.1103/PhysRevLett.120.142301), arXiv:[1706.05984](https://arxiv.org/abs/1706.05984) [hep-ex]
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- A.M. Sirunyan et al., **Measurement of normalized differential $t\bar{t}$ cross sections in the dilepton channel from pp collisions at $\sqrt{s} = 13$ TeV**, *JHEP*. 04 (2018) 060, doi:[10.1007/JHEP04\(2018\)060](https://doi.org/10.1007/JHEP04(2018)060), arXiv:[1708.07638](https://arxiv.org/abs/1708.07638) [hep-ex]
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- A.M. Sirunyan et al., **Measurement of associated $Z + \text{charm}$ production in proton-proton collisions at $\sqrt{s} = 8$ TeV**, *Eur. Phys. J. C* 78 (2018) 287, doi:[10.1140/epjc/s10052-018-5752-x](https://doi.org/10.1140/epjc/s10052-018-5752-x), arXiv:[1711.02143](https://arxiv.org/abs/1711.02143) [hep-ex]
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