Publication List

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M. Bhattacharya et al., **Portability: A Necessary Approach for Future Scientific Software**, in: **2022 Snowmass Summer Study**, 2022. http://arxiv.org/abs/2203.09945, arXiv:2203.09945 [physics.comp-ph]

A. Tumasyan et al., **Search for new particles in an extended Higgs sector with four b quarks in the final state at $\sqrt{s}$ = 13 TeV**, (2022). http://arxiv.org/abs/2203.00480, arXiv:2203.00480 [hep-ex]

A. Tumasyan et al., **Search for Higgs boson pair production in the four b quark final state in proton-proton collisions at $\sqrt{s}$ = 13 TeV**, (2022). http://arxiv.org/abs/2202.09617, arXiv:2202.09617 [hep-ex]

A. Tumasyan et al., **First evidence for off-shell production of the Higgs boson and measurement of its width**, (2022). http://arxiv.org/abs/2202.06923, arXiv:2202.06923 [hep-ex]

A. Tumasyan et al., **Search for a W' boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state at $\sqrt{s}$ = 13 TeV**, (2022). http://arxiv.org/abs/2202.12988, arXiv:2202.12988 [hep-ex]

A. Tumasyan et al., **Measurement of the Drell-Yan forward-backward asymmetry at high dilepton masses in proton-proton collisions at $\sqrt{s}$ = 13 TeV**, (2022). http://arxiv.org/abs/2202.12327, arXiv:2202.12327 [hep-ex]

A. Tumasyan et al., **Nuclear modification of Υ states in pPb collisions at $\sqrt{s_{NN}}$ = 5.02 TeV**, (2022). http://arxiv.org/abs/2202.11807, arXiv:2202.11807 [hep-ex]

A. Tumasyan et al., **Search for new physics in the lepton plus missing transverse momentum final state in proton-proton collisions at $\sqrt{s}$ = 13 TeV**, (2022). http://arxiv.org/abs/2202.06075, arXiv:2202.06075 [hep-ex]

A. Tumasyan et al., **Search for long-lived heavy neutral leptons with displaced vertices in proton-proton collisions at $\sqrt{s}$ =13 TeV**, (2022). http://arxiv.org/abs/2201.05578, arXiv:2201.05578 [hep-ex]

A. Tumasyan et al., **Search for resonances decaying to three W bosons in proton-proton collisions at $\sqrt{s}$ = 13 TeV**, (2022). http://arxiv.org/abs/2201.08476, arXiv:2201.08476 [hep-ex]

A. Tumasyan et al., **Identification of hadronic tau lepton decays using a deep neural network**, (2022). http://arxiv.org/abs/2201.08458, arXiv:2201.08458 [hep-ex]

A. Tumasyan et al., **Search for high-mass resonances decaying to a jet and a Lorentz-boosted resonance in proton-proton collisions at $\sqrt{s}$ = 13 TeV**, (2022). http://arxiv.org/abs/2201.02140, arXiv:2201.02140 [hep-ex]

A. Tumasyan et al., **Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s}$ = 13 TeV**, *JHEP*. 04 (2022) 147, doi:10.1007/JHEP04(2022)147, arXiv:2106.14246 [hep-ex]

A. Tumasyan et al., **Measurement of W $^{\pm}\gamma$ differential cross sections in proton-proton collisions at $\sqrt{s}$ = 13 TeV and effective field theory constraints**, *Phys. Rev. D.* 105 (2022) 052003, doi:10.1103/PhysRevD.105.052003, arXiv:2111.13948 [hep-ex]

A. Tumasyan et al., **Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s}$ = 13 TeV**, *JHEP*. 04 (2022) 047, doi:10.1007/JHEP04(2022)047, arXiv:2112.03949 [hep-ex]

A. Tumasyan et al., **Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s}$ = 13 TeV**, *JHEP*. 04 (2022) 091, doi:10.1007/JHEP04(2022)091, arXiv:2111.06296 [hep-ex]

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A. Tumasyan et al., **Measurement of the inclusive and differential Higgs boson production cross sections in the decay mode to a pair of τ leptons in pp collisions at $\sqrt{s}$ = 13 TeV**, *Phys. Rev. Lett.* 128 (2022) 081805, doi:10.1103/PhysRevLett.128.081805, arXiv:2107.11486 [hep-ex]

A. Tumasyan et al., **Strategies and performance of the CMS silicon tracker alignment during LHC Run 2**, *Nucl. Instrum. Meth. A*. 1037 (2022) 166795, doi:10.1016/j.nima.2022.166795, arXiv:2111.08757 [physics.ins-det]

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A. Tumasyan et al., **Search for long-lived particles decaying into muon pairs in proton-proton collisions at $\sqrt{s}$ = 13 TeV collected with a dedicated high-rate data stream**, *JHEP*. 04 (2022) 062, doi:10.1007/JHEP04(2022)062, arXiv:2112.13769 [hep-ex]

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