

# Publication List

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- A. Apresyan et al., **Detector R&D needs for the next generation  $e^+e^-$  collider**, (2023). <http://arxiv.org/abs/2306.13567>, arXiv:2306.13567 [hep-ex]
- M. Atif et al., **Evaluating Portable Parallelization Strategies for Heterogeneous Architectures in High Energy Physics**, (2023). <http://arxiv.org/abs/2306.15869>, arXiv:2306.15869 [hep-ex]
- A. Tumasyan et al., **Performance of the local reconstruction algorithms for the CMS hadron calorimeter with Run 2 data**, (2023). <http://arxiv.org/abs/2306.10355>, arXiv:2306.10355 [hep-ex]
- A. Tumasyan et al., **Two-particle Bose-Einstein correlations and their Lévy parameters in PbPb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV**, (2023). <http://arxiv.org/abs/2306.11574>, arXiv:2306.11574 [nucl-ex]
- A. Hayrapetyan et al., **Observation of four top quark production in proton-proton collisions at  $\sqrt{s} = 13$  TeV**, (2023). <http://arxiv.org/abs/2305.13439>, arXiv:2305.13439 [hep-ex]
- A. Tumasyan et al., **Measurements of the azimuthal anisotropy of prompt and nonprompt charmonia in PbPb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV**, (2023). <http://arxiv.org/abs/2305.16928>, arXiv:2305.16928 [hep-ex]
- A. Hayrapetyan et al., **Search for the lepton-flavor violating decay of the Higgs boson and additional Higgs bosons in the  $e \mu$  final state in proton-proton collisions at  $\sqrt{s} = 13$  TeV**, (2023). <http://arxiv.org/abs/2305.18106>, arXiv:2305.18106 [hep-ex]
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- A. Tumasyan et al., **Search for top squark pair production in a final state with at least one hadronically decaying tau lepton in proton-proton collisions at  $\sqrt{s} = 13$  TeV**, (2023). <http://arxiv.org/abs/2304.07174>, arXiv:2304.07174 [hep-ex]
- A. Tumasyan et al., **First measurement of the top quark pair production cross section in proton-proton collisions at  $\sqrt{s} = 13.6$  TeV**, (2023). <http://arxiv.org/abs/2303.10680>, arXiv:2303.10680 [hep-ex]
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- G. Cerati et al., **Snowmass Computational Frontier: Topical Group Report on Experimental Algorithm Parallelization**, (2022). <http://arxiv.org/abs/2209.07356>, arXiv:2209.07356 [hep-ex]
- M. Bhattacharya et al., **Portability: A Necessary Approach for Future Scientific Software**, in: **Snowmass 2021**, 2022. <http://arxiv.org/abs/2203.09945>, arXiv:2203.09945 [physics.comp-ph]
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- A. Tumasyan et al., **Measurement of the  $B_S^0 \rightarrow \mu^+ \mu^-$  decay properties and search for the  $B^0 \rightarrow \mu^+ \mu^-$  decay in proton-proton collisions at  $\sqrt{s} = 13$  TeV**, *Phys. Lett. B.* 842 (2023) 137955, doi:10.1016/j.physletb.2023.137955, arXiv:2212.10311 [hep-ex]
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- 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]
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