

Publication List from all Collaborations and Experiments

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- 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]
- A. Tumasyan et al., **Search for resonances in events with photon and jet final states in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2023). <http://arxiv.org/abs/2305.07998>, arXiv:2305.07998 [hep-ex]
- 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]
- V. Khachatryan et al., **Exclusive and semi-exclusive $\pi^+\pi^-$ production in proton-proton collisions at $\sqrt{s} = 7$ TeV**, (2017). <http://arxiv.org/abs/1706.08310>, arXiv:1706.08310 [hep-ex]
- G.L. Bayatian et al., **CMS expression of interest in the SLHC**, (2007)
- A. Tumasyan et al., **Observation of triple J/ψ meson production in proton-proton collisions**, *Nature Phys.* 19 (2023) 338–350, doi:10.1038/s41567-022-01838-y, arXiv:2111.05370 [hep-ex]
- A. Tumasyan et al., **Strange hadron collectivity in pPb and PbPb collisions**, *JHEP.* 05 (2023) 007, doi:10.1007/JHEP05(2023)007, arXiv:2205.00080 [nucl-ex]
- A. Tumasyan et al., **Measurement of the $B_s^0 \mu^+ \mu^-$ decay properties and search for the $B^0 \mu^+ \mu^-$ 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]
- 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 resonant production of strongly coupled dark matter in proton-proton collisions at 13 TeV**, *JHEP.* 06 (2022) 156, doi:10.1007/JHEP06(2022)156, arXiv:2112.11125 [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]
- A. Tumasyan et al., **Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $\sqrt{s} = 13$ TeV**, *JHEP.* 02 (2022) 169, doi:10.1007/JHEP02(2022)169,

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A. Tumasyan et al., **Search for Flavor-Changing Neutral Current Interactions of the Top Quark and Higgs Boson in Final States with Two Photons in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV**, *Phys. Rev. Lett.* 129 (2022) 032001, doi:10.1103/PhysRevLett.129.032001, arXiv:2111.02219 [hep-ex]

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A. Tumasyan et al., **Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Eur. Phys. J. C* 82 (2022) 153, doi:10.1140/epjc/s10052-022-10027-3, arXiv:2110.04809 [hep-ex]

A. Tumasyan et al., **Search for heavy resonances decaying to WW, WZ, or WH boson pairs in the lepton plus merged jet final state in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Rev. D* 105 (2022) 032008, doi:10.1103/PhysRevD.105.032008, arXiv:2109.06055 [hep-ex]

A. Tumasyan et al., **Measurement of double-parton scattering in inclusive production of four jets with low transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *JHEP*. 01 (2022) 177, doi:10.1007/JHEP01(2022)177, arXiv:2109.13822 [hep-ex]

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A.M. Sirunyan et al., **Using Z Boson Events to Study Parton-Medium Interactions in Pb-Pb Collisions**, *Phys. Rev. Lett.* 128 (2022) 122301, doi:10.1103/PhysRevLett.128.122301, arXiv:2103.04377 [hep-ex]

A. Tumasyan et al., **Measurements of the associated production of a W boson and a charm quark in proton-proton collisions at $\sqrt{s} = 8$ TeV**, *Eur. Phys. J. C* 82 (2022) 1094, doi:10.1140/epjc/s10052-022-10897-7, arXiv:2112.00895 [hep-ex]

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- A. Tumasyan et al., **Probing Charm Quark Dynamics via Multiparticle Correlations in Pb-Pb Collisions at $\sqrt{s_{NN}}=5.02$ TeV**, *Phys. Rev. Lett.* 129 (2022) 022001, doi:[10.1103/PhysRevLett.129.022001](https://doi.org/10.1103/PhysRevLett.129.022001), arXiv:[2112.12236](https://arxiv.org/abs/2112.12236) [hep-ex]
- A. Tumasyan et al., **Evidence for WW/WZ vector boson scattering in the decay channel $\ell\nu q\bar{q}$ produced in association with two jets in proton-proton collisions at $s=13$ TeV**, *Phys. Lett. B.* 834 (2022) 137438, doi:[10.1016/j.physletb.2022.137438](https://doi.org/10.1016/j.physletb.2022.137438), arXiv:[2112.05259](https://arxiv.org/abs/2112.05259) [hep-ex]
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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](https://doi.org/10.1007/JHEP04(2022)062), arXiv:[2112.13769](https://arxiv.org/abs/2112.13769) [hep-ex]
- A. Tumasyan et al., **Analysis of the CP structure of the Yukawa coupling between the Higgs boson and τ leptons in proton-proton collisions at $\sqrt{s}=13$ TeV**, *JHEP.* 06 (2022) 012, doi:[10.1007/JHEP06\(2022\)012](https://doi.org/10.1007/JHEP06(2022)012), arXiv:[2110.04836](https://arxiv.org/abs/2110.04836) [hep-ex]
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- A. Tumasyan et al., **Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at $\sqrt{s}=13$ TeV**, *JHEP.* 02 (2022) 142, doi:[10.1007/JHEP02\(2022\)142](https://doi.org/10.1007/JHEP02(2022)142), arXiv:[2111.10431](https://arxiv.org/abs/2111.10431) [hep-ex]
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