

Publication List from all Collaborations and Experiments

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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]
- 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., **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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- 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, arXiv:2112.09734 [hep-ex]
- A. Tumasyan et al., **Measurement of the inclusive $t\bar{t}$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV**, *JHEP.* 04 (2022) 144, doi:10.1007/JHEP04(2022)144, arXiv:2112.09114 [hep-ex]
- 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]
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- A. Tumasyan et al., **Measurement of the inclusive and differential WZ production cross sections, polarization angles, and triple gauge couplings in pp collisions at $\sqrt{s} = 13$ TeV**, *JHEP.* 07 (2022) 032, doi:10.1007/JHEP07(2022)032, arXiv:2110.11231 [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](https://doi.org/10.1140/epjc/s10052-022-10027-3), arXiv:[2110.04809](https://arxiv.org/abs/2110.04809) [hep-ex]
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- A. Tumasyan et al., **Search for resonances decaying to three W bosons in the hadronic final state in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Rev. D.* 106 (2022) 012002, doi:[10.1103/PhysRevD.106.012002](https://doi.org/10.1103/PhysRevD.106.012002), arXiv:[2112.13090](https://arxiv.org/abs/2112.13090) [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](https://doi.org/10.1103/PhysRevLett.128.122301), arXiv:[2103.04377](https://arxiv.org/abs/2103.04377) [hep-ex]
- A. Tumasyan et al., **Measurements of the associated production of a W boson and a charm quark in protonproton collisions at $\sqrt{s} = 8$ TeV**, *Eur. Phys. J. C.* 82 (2022) 1094, doi:[10.1140/epjc/s10052-022-10897-7](https://doi.org/10.1140/epjc/s10052-022-10897-7), arXiv:[2112.00895](https://arxiv.org/abs/2112.00895) [hep-ex]
- A. Tumasyan et al., **Measurement of the production cross section for $Z+b$ jets in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Rev. D.* 105 (2022) 092014, doi:[10.1103/PhysRevD.105.092014](https://doi.org/10.1103/PhysRevD.105.092014), arXiv:[2112.09659](https://arxiv.org/abs/2112.09659) [hep-ex]
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- A. Tumasyan et al., **Fragmentation of jets containing a prompt J/ψ meson in PbPb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV**, *Phys. Lett. B.* 825 (2022) 136842, doi:[10.1016/j.physletb.2021.136842](https://doi.org/10.1016/j.physletb.2021.136842), arXiv:[2106.13235](https://arxiv.org/abs/2106.13235) [hep-ex]
- 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 $\ell\nu qq$ 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]

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- A. Tumasyan et al., **Search for long-lived particles produced in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *JHEP.* 03 (2022) 160, doi:[10.1007/JHEP03\(2022\)160](https://doi.org/10.1007/JHEP03(2022)160), arXiv:[2110.13218](https://arxiv.org/abs/2110.13218) [hep-ex]
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