

Publication List from all Collaborations and Experiments

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- 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., **Inclusive nonresonant multilepton probes of new phenomena at $\sqrt{s} = 13$ TeV**, (2022). <http://arxiv.org/abs/2202.08676>, arXiv:2202.08676 [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., **Observation of the B_c^+ meson in PbPb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV**, (2022). <http://arxiv.org/abs/2201.02659>, arXiv:2201.02659 [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 charged-lepton flavor violation in top quark production and decay in pp collisions at $\sqrt{s} = 13$ TeV**, (2022). <http://arxiv.org/abs/2201.07859>, arXiv:2201.07859 [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]
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- 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](https://doi.org/10.1007/JHEP02(2022)169), arXiv:[2112.09734](https://arxiv.org/abs/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](https://doi.org/10.1007/JHEP04(2022)144), arXiv:[2112.09114](https://arxiv.org/abs/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](https://doi.org/10.1103/PhysRevLett.128.081805), arXiv:[2107.11486](https://arxiv.org/abs/2107.11486) [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]
- 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](https://doi.org/10.1103/PhysRevD.105.032008), arXiv:[2109.06055](https://arxiv.org/abs/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](https://doi.org/10.1007/JHEP01(2022)177), arXiv:[2109.13822](https://arxiv.org/abs/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](https://doi.org/10.1103/PhysRevLett.128.122301), arXiv:[2103.04377](https://arxiv.org/abs/2103.04377) [hep-ex]
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- A. Tumasyan et al., **A new calibration method for charm jet identification validated with proton-proton collision events at $\sqrt{s} = 13$ TeV**, *JINST*. 17 (2022) P03014, doi:[10.1088/1748-0221/17/03/P03014](https://doi.org/10.1088/1748-0221/17/03/P03014), arXiv:[2111.03027](https://arxiv.org/abs/2111.03027) [hep-ex]
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