

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., **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., **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), doi:10.1016/j.physletb.2022.137397, arXiv:2202.11807 [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**, (2021). <http://arxiv.org/abs/2112.00895>, arXiv:2112.00895 [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 $\sqrt{s} = 13$ TeV**, (2021). <http://arxiv.org/abs/2112.05259>, arXiv:2112.05259 [hep-ex]
- A. Tumasyan et al., **Observation of triple J/ ψ meson production in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2021). <http://arxiv.org/abs/2111.05370>, arXiv:2111.05370 [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]
- 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, arXiv:2112.09734 [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]

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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 $\sqrt{s} = 13\text{ TeV}$** , *JHEP.* 07 (2022) 032, doi:[10.1007/JHEP07\(2022\)032](https://doi.org/10.1007/JHEP07(2022)032), arXiv:[2110.11231](https://arxiv.org/abs/2110.11231) [hep-ex]
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- A. Tumasyan et al., **Study of quark and gluon jet substructure in Z+jet and dijet events from pp collisions**, *JHEP.* 01 (2022) 188, doi:[10.1007/JHEP01\(2022\)188](https://doi.org/10.1007/JHEP01(2022)188), arXiv:[2109.03340](https://arxiv.org/abs/2109.03340) [hep-ex]
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- 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 $\sqrt{s} = 13\text{ TeV}$** , *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]
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- A. Tumasyan et al., **Search for a heavy resonance decaying into a top quark and a W boson in the lepton+jets final state at $\sqrt{s} = 13\text{ TeV}$** , *JHEP.* 04 (2022) 048, doi:[10.1007/JHEP04\(2022\)048](https://doi.org/10.1007/JHEP04(2022)048), arXiv:[2111.10216](https://arxiv.org/abs/2111.10216) [hep-ex]
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- A. Tumasyan et al., **First search for exclusive diphoton production at high mass with tagged protons in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$** , *Phys. Rev. Lett.* 129 (2022) 011801, doi:[10.1103/PhysRevLett.129.011801](https://doi.org/10.1103/PhysRevLett.129.011801), arXiv:[2110.05916](https://arxiv.org/abs/2110.05916) [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 $\sqrt{s} = 13\text{ TeV}$** , *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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- A. Tumasyan et al., **Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating non-resonant ZZ or ZH production at $\sqrt{s} = 13$ TeV**, *JHEP.* 04 (2022) 087, doi:[10.1007/JHEP04\(2022\)087](https://doi.org/10.1007/JHEP04(2022)087), arXiv:[2111.13669](https://arxiv.org/abs/2111.13669) [hep-ex]
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