

Publication List from all Collaborations and Experiments

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- 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]
- 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., **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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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 [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 [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 [hep-ex]
- 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](https://doi.org/10.1103/PhysRevLett.129.032001), arXiv:2111.02219 [hep-ex]
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- A. Tumasyan et al., **Strategies and performance of the CMS silicon tracker alignment during LHC Run 2**, *Nucl. Instrum. Meth. A*. 1037 (2022) 166795, doi:[10.1016/j.nima.2022.166795](https://doi.org/10.1016/j.nima.2022.166795), arXiv:2111.08757 [physics.ins-det]
- A. Tumasyan et al., **Search for heavy resonances decaying to $Z(\nu\bar{\nu})V(q\bar{q}')$ in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Rev. D*. 106 (2022) 012004, doi:[10.1103/PhysRevD.106.012004](https://doi.org/10.1103/PhysRevD.106.012004), arXiv:2109.08268 [hep-ex]
- 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 [hep-ex]

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- A. Tumasyan et al., **Measurement of double-parton scattering in inclusive production of four jets with low transverse momentum in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$** , *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]
- A. Tumasyan et al., **Study of dijet events with large rapidity separation in proton-proton collisions at $\sqrt{s} = 2.76\text{ TeV}$** , *JHEP.* 03 (2022) 189, doi:[10.1007/JHEP03\(2022\)189](https://doi.org/10.1007/JHEP03(2022)189), arXiv:[2111.04605](https://arxiv.org/abs/2111.04605) [hep-ex]
- A. Tumasyan et al., **Search for resonances decaying to three W bosons in the hadronic final state in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$** , *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. Tumasyan et al., **Measurements of the associated production of a W boson and a charm quark in protonproton collisions at $\sqrt{s} = 8\text{TeV}$** , *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 $\sqrt{s} = 13\text{ TeV}$** , *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]
- A. Tumasyan et al., **Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in protonproton collisions at $\sqrt{s} = 13\text{TeV}$** , *Eur. Phys. J. C.* 82 (2022) 290, doi:[10.1140/epjc/s10052-022-10127-0](https://doi.org/10.1140/epjc/s10052-022-10127-0), arXiv:[2111.01299](https://arxiv.org/abs/2111.01299) [hep-ex]
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- A. Tumasyan et al., **Probing Charm Quark Dynamics via Multiparticle Correlations in Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02\text{ TeV}$** , *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 $s=13\text{ TeV}$** , *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]
- A. Tumasyan et al., **Search for heavy resonances decaying to a pair of Lorentz-boosted Higgs bosons in final states with leptons and a bottom quark pair at $\sqrt{s}= 13\text{ TeV}$** , *JHEP.* 05 (2022) 005, doi:[10.1007/JHEP05\(2022\)005](https://doi.org/10.1007/JHEP05(2022)005), arXiv:[2112.03161](https://arxiv.org/abs/2112.03161) [hep-ex]
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- A. Tumasyan et al., **Search for long-lived particles decaying into muon pairs in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$ 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 $\sqrt{s} = 13\text{ TeV}$** , *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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