

Publication List from all Collaborations and Experiments

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- A. Tumasyan et al., **Observation of $B^0 \rightarrow \psi(2S) K_S^0 \pi^+ \pi^-$ and $B_S^0 \rightarrow \psi(2S) K_S^0$ decays**, (2022). <http://arxiv.org/abs/2201.09131>, arXiv:2201.09131 [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., **Measurement of the inclusive and differential $t\bar{t}\gamma$ cross sections in the dilepton channel and effective field theory interpretation in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2022). <http://arxiv.org/abs/2201.07301>, arXiv:2201.07301 [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., **Precision measurement of the W boson decay branching fractions in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2022). <http://arxiv.org/abs/2201.07861>, arXiv:2201.07861 [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., **Search for invisible decays of the Higgs boson produced via vector boson fusion in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2022). <http://arxiv.org/abs/2201.11585>, arXiv:2201.11585 [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 higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2022). <http://arxiv.org/abs/2201.04206>, arXiv:2201.04206 [hep-ex]
- A. Tumasyan et al., **Search for single production of a vector-like T quark decaying to a top quark and a Z boson in the final state with jets and missing transverse momentum at $\sqrt{s} = 13$ TeV**, (2022). <http://arxiv.org/abs/2201.02227>, arXiv:2201.02227 [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., **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, arXiv:2106.13235 [hep-ex]
- A.M. Sirunyan et al., **Evidence for X(3872) in Pb-Pb Collisions and Studies of its Prompt Production at $\sqrt{s_{NN}} = 5.02$ TeV**, *Phys. Rev. Lett.* 128 (2022) 032001, doi:10.1103/PhysRevLett.128.032001, arXiv:2102.13048 [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**, (2021). <http://arxiv.org/abs/2112.03949>, 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**, (2021). <http://arxiv.org/abs/2112.11125>, arXiv:2112.11125 [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**, (2021). <http://arxiv.org/abs/2112.09734>, 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**, (2021). <http://arxiv.org/abs/2112.09114>, arXiv:2112.09114 [hep-ex]
- A. Tumasyan et al., **Search for resonances decaying to three W bosons in the hadronic final state in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2021). <http://arxiv.org/abs/2112.13090>, arXiv:2112.13090 [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]
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- 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 $\sqrt{s} = 13$ TeV**, (2021). <http://arxiv.org/abs/2112.03161>, arXiv:2112.03161 [hep-ex]
- 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**, (2021). <http://arxiv.org/abs/2112.13769>, arXiv:2112.13769 [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**, (2021). <http://arxiv.org/abs/2111.13948>, arXiv:2111.13948 [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**, (2021). <http://arxiv.org/abs/2111.06296>, arXiv:2111.06296 [hep-ex]
- A. Tumasyan et al., **Strategies and performance of the CMS silicon tracker alignment during LHC Run 2**, (2021). <http://arxiv.org/abs/2111.08757>, arXiv:2111.08757 [physics.ins-det]
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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**, (2021). <http://arxiv.org/abs/2111.10431>, arXiv:2111.10431 [hep-ex]
- 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**, (2021). <http://arxiv.org/abs/2110.11231>, arXiv:2110.11231 [hep-ex]
- 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**, (2021). <http://arxiv.org/abs/2110.04809>, arXiv:2110.04809 [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 $\sqrt{s} = 13$ TeV**, (2021). <http://arxiv.org/abs/2110.05916>, arXiv:2110.05916 [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 $\sqrt{s} = 13$ TeV**, (2021). <http://arxiv.org/abs/2109.06055>, 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**, (2021). <http://arxiv.org/abs/2109.13822>, arXiv:2109.13822 [hep-ex]
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- A.M. Sirunyan et al., **Measurement of the CP -violating phase ϕ_s in the $B_s^0 \rightarrow J/\psi\phi(1020) \rightarrow \mu^+\mu^-K^+K^-$ channel in proton-proton collisions at $\sqrt{s} = 13$ TeV**, *Phys. Lett. B* 816 (2021) 136188, doi:10.1016/j.physletb.2021.136188, arXiv:2007.02434 [hep-ex]
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