

Publication List from all Collaborations and Experiments

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- A. Hayrapetyan et al., **Measurement of inclusive and differential cross sections of single top quark production in association with a W boson in proton-proton collisions at $\sqrt{s} = 13.6$ TeV**, (2024). <http://arxiv.org/abs/2409.06444>, arXiv:2409.06444 [hep-ex]
- A. Hayrapetyan et al., **Bottom quark energy loss and hadronization with B^+ and B_s^0 nuclear modification factors using pp and \PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV**, (2024). <http://arxiv.org/abs/2409.07258>, arXiv:2409.07258 [nucl-ex]
- A. Hayrapetyan et al., **Search for light long-lived particles decaying to displaced jets in proton-proton collisions at $\sqrt{s} = 13.6$ TeV**, (2024). <http://arxiv.org/abs/2409.10806>, arXiv:2409.10806 [hep-ex]
- A. Hayrapetyan et al., **Pseudorapidity distributions of charged hadrons in lead-lead collisions at $\sqrt{s_{NN}} = 5.36$ TeV**, (2024). <http://arxiv.org/abs/2409.00838>, arXiv:2409.00838 [hep-ex]
- A. Hayrapetyan et al., **Measurements of polarization and spin correlation and observation of entanglement in top quark pairs using lepton+jets events from proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2409.11067>, arXiv:2409.11067 [hep-ex]
- A. Hayrapetyan et al., **Search for bottom quark associated production of the standard model Higgs boson in final states with leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2408.01344>, arXiv:2408.01344 [hep-ex]
- A. Hayrapetyan et al., **Measurement of the inclusive cross sections for W and Z boson production in proton-proton collisions at $\sqrt{s} = 5.02$ and 13 TeV**, (2024). <http://arxiv.org/abs/2408.03744>, arXiv:2408.03744 [hep-ex]
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- A. Hayrapetyan et al., **Test of lepton flavor universality in semileptonic B_c^+ meson decays in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2408.00678>, arXiv:2408.00678 [hep-ex]
- A. Hayrapetyan et al., **Constraints on the Higgs boson self-coupling from the combination of single and double Higgs boson production in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2407.13554>, arXiv:2407.13554 [hep-ex]
- A. Hayrapetyan et al., **Measurement of the $B_s^0 \rightarrow J/\psi K_S^0$ effective lifetime from proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2407.13441>, arXiv:2407.13441 [hep-ex]
- A. Hayrapetyan et al., **Measurement of boosted Higgs bosons produced via vector boson fusion or gluon fusion in the $H \rightarrow b\bar{b}$ decay mode using LHC proton-proton collision data at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2407.08012>, arXiv:2407.08012 [hep-ex]
- A. Hayrapetyan et al., **Measurement of the $t\bar{t}H$ and tH production rates in the $H \rightarrow b\bar{b}$ decay channel using proton-proton collision data at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2407.10896>, arXiv:2407.10896 [hep-ex]
- A. Hayrapetyan et al., **Search for long-lived heavy neutral leptons in proton-proton collision events with a lepton-jet pair associated with a secondary vertex at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2407.10717>, arXiv:2407.10717 [hep-ex]

- A. Hayrapetyan et al., **Model-independent search for pair production of new bosons decaying into muons in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2407.20425>, arXiv:2407.20425 [hep-ex]
- A. Hayrapetyan et al., **Search for nuclear modifications of B^+ meson production in pPb collisions at $\sqrt{s_{NN}} = 8.16$ TeV**, (2024). <http://arxiv.org/abs/2407.05402>, arXiv:2407.05402 [nucl-ex]
- A. Tumasyan et al., **Search for resonant pair production of Higgs bosons in the $b\bar{b}b\bar{b}$ final state using large-area jets in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2407.13872>, arXiv:2407.13872 [hep-ex]
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- A. Hayrapetyan et al., **Measurement of the polarizations of prompt and non-prompt J/ψ and $\psi(2S)$ mesons produced in pp collisions at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2406.14409>, arXiv:2406.14409 [hep-ex]
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- A. Hayrapetyan et al., **Review of searches for vector-like quarks, vector-like leptons, and heavy neutral leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV at the CMS experiment**, (2024). <http://arxiv.org/abs/2405.17605>, arXiv:2405.17605 [hep-ex]
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- A. Hayrapetyan et al., **Search for a standard model-like Higgs boson in the mass range between 70 and 110 GeV in the diphoton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2405.18149>, arXiv:2405.18149 [hep-ex]
- A. Hayrapetyan et al., **Girth and groomed radius of jets recoiling against isolated photons in lead-lead and proton-proton collisions at $\sqrt{s_{NN}} = 5.02$ TeV**, (2024). <http://arxiv.org/abs/2405.02737>, arXiv:2405.02737 [nucl-ex]
- A. Hayrapetyan et al., **Dark sector searches with the CMS experiment**, (2024). <http://arxiv.org/abs/2405.13778>, arXiv:2405.13778 [hep-ex]
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- A. Hayrapetyan et al., **Searches for Pair-Produced Multijet Resonances using Data Scouting in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV**, (2024). <http://arxiv.org/abs/2404.02992>, arXiv:2404.02992 [hep-ex]

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