## Publication List

## Oliver Gutsche

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- V. Chekhovsky et al., Search for top squarks in final states with many light-flavor jets and 0, 1, or 2 charged leptons in proton-proton collisions at  $\sqrt{s} = 13$  TeV, (2025). http://arxiv.org/abs/2506.08825, arXiv:2506.08825 [hep-ex]
- A. Hayrapetyan et al., Machine learning method for enforcing variable independence in background estimation with LHC data: ABCDisCoTEC, (2025). http://arxiv.org/abs/2506.08826, arXiv:2506.08826 [hep-ex]
- V. Chekhovsky et al., Search for the rare decay D  $^0 \rightarrow \mu^+ \mu^-$  in proton-proton collisions at  $\sqrt{s} = 13.6$  TeV, (2025). http://arxiv.org/abs/2506.06152, arXiv:2506.06152 [hep-ex]
- A. Hayrapetyan et al., **Determination of the spin and parity of all-charm tetraquarks**, (2025). http://arxiv.org/abs/2506.07944, arXiv:2506.07944 [hep-ex]
- V. Chekhovsky et al., Search for dark matter produced in association with a Higgs boson decaying to a  $\tau$  lepton pair in proton-proton collisions at  $\sqrt{s} = 13$  TeV, (2025). http://arxiv.org/abs/2506.04431, arXiv:2506.04431 [hep-ex]
- V. Chekhovsky et al., Search for nonresonant new physics signals in high-mass dilepton events produced in association with b-tagged jets in proton-proton collisions at  $\sqrt{s} = 13$  TeV, (2025). http://arxiv.org/abs/2506.13565, arXiv:2506.13565 [hep-ex]
- A. Hayrapetyan et al., Search for the nonresonant and resonant production of a Higgs boson in association with an additional scalar boson in the  $\gamma\gamma\pi$  final state in proton-proton collisions at  $\sqrt{s}=13$  TeV, (2025). http://arxiv.org/abs/2506.23012, arXiv:2506.23012 [hep-ex]
- A. Hayrapetyan et al., Measurement of WWZ and ZH production cross sections at  $\sqrt{s} = 13$  and 13.6 TeV, (2025). http://arxiv.org/abs/2505.20483, arXiv:2505.20483 [hep-ex]
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- V. Chekhovsky et al., Measurement of event shapes in minimum-bias events from proton-proton collisions at  $\sqrt{s} = 13$  TeV, (2025). http://arxiv.org/abs/2505.17850, arXiv:2505.17850 [hep-ex]
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- V. Chekhovsky et al., Combination and interpretation of differential Higgs boson production cross sections in proton-proton collisions at  $\sqrt{s} = 13$  TeV, (2025). http://arxiv.org/abs/2504.13081, arXiv:2504.13081 [hep-ex]
- V. Chekhovsky et al., Search for jet quenching with dijets from high-multiplicity pPb collisions at  $\sqrt{s_{NN}} = 8.16$  TeV, (2025). http://arxiv.org/abs/2504.08507, arXiv:2504.08507 [nucl-ex]
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- A. Hayrapetyan et al., Search for charged-lepton flavour violation in top quark interactions with an up-type quark, a muon, and a  $\tau$  lepton in proton-proton collisions at  $\sqrt{s} = 13$  TeV, (2025). http://arxiv.org/abs/2504.08532, arXiv:2504.08532 [hep-ex]
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