

# **Spinning gluon and long range correlation at RHIC, LHC, and EIC**

*Monday, 10 February 2025 15:00 (60)*

In this talk, we will present a proposal to unveil the hadron tomography through the nucleon energy-energy correlators (NEEC) at hadron colliders (RHIC and LHC) and the future electron-ion collider (EIC), focusing on spinning gluon effects and small-x saturation. We will show that the gluon saturation at small-x predicts a significantly different shape for the angular distribution of the NEEC. We further discuss the long range azimuthal angle asymmetries to probe the spinning (linearly polarized) gluon distributions inside the nucleon.

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