

DIS2022: XXIX International Workshop on Deep-Inelastic Scattering and Related Subjects

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Type: **Parallel talk**

SIDIS reconstruction and observables at EIC with ATHENA

Thursday 5 May 2022 08:40 (20 minutes)

ATHENA (A Totally Hermetic Electron-Nucleus Apparatus) is a proposed detector system for the future Electron-Ion Collider. This talk will focus on the physics program using semi-inclusive deep-inelastic scattering. In particular the expected performance of the detector and novel reconstruction methods for SIDIS variables. Extensions of these methods using ML methods will be presented as well. Additionally, we will discuss the projected resolution of gluon saturation observables with ATHENA, specifically through the measurement of away-side suppression of dihadrons at low- x .

Submitted on behalf of a Collaboration?

Yes

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