## **Deep Inelastic Scattering 2025**



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## Overview on Efforts for a Second Detector at the Electron-Ion Collider (EIC)

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The Electron-Ion Collider (EIC) will provide a unique experimental platform to explore the properties of gluons in nucleons and nuclei, offering new insights into their structure and dynamics. The EIC community has outlined a detailed physics program in the White Paper and identified the demanding detector requirements in the Yellow Report. The primary general-purpose detector, ePIC, is designed to support a broad range of physics studies. However, there is strong community support for a second detector at the EIC to further enhance the scientific capabilities of the facility. A second detector would provide cross-checks and systematic controls for potential discoveries, while incorporating complementary technologies to address physics measurements that may be underrepresented by ePIC. In particular, it would improve forward detector acceptance at low transverse momentum  $(p_T)$  and enable more precise measurements in exclusive, diffractive, and tagging physics. This talk will provide a general overview of the second detector and outline its potential capabilities, highlighting key areas of the physics program it could enhance.

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