Connecting The Dots 2022



Contribution ID: 45

Type: Plenary

Track Reconstruction at the Electron-Ion Collider

Thursday 2 June 2022 13:30 (25 minutes)

During the past year, substantial progress has been made on the design of Detector 1 for the Electron-Ion Collider (EIC). All proposed detector configurations used a combination of silicon trackers and gas detectors for particle tracking and vertex reconstruction. A DD4hep + Gaudi + Acts + EDM4hep simulation and reconstruction framework was developed by the ATHENA proposal collaboration to demonstrate a tracking performance consistent with the EIC physics requirements. In this talk, I will go over the ATHENA tracking system configuration, reconstruction studies with Acts, and our plan to further this effort for the official EIC Project 'Detector 1'.

Consider for young scientist forum (Student or postdoc speaker)

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