## **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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