Contribution ID: **30** Type: **not specified**

ePIC: A General-Purpose Detector for the EIC

Monday 22 September 2025 14:20 (25 minutes)

The Electron-Proton/Ion Collider experiment (ePIC) will be the first detector at the future Electron-Ion Collider (EIC), which will be built at Brookhaven National Laboratory. The central region of ePIC follows a standard collider detector layout optimized for electron-ion Deep Inelastic Scattering (DIS) with low-mass tracking, high precision electromagnetic calorimetry, extensive particle identification (PID) capability and hadron calorimetry covering a phase space of 2π in azimuth and $|\eta| < 4$ (˜3.5) for calorimetry (tracking and PID). In addition to the central detector, ePIC has extensive beamline instrumentation in both the outgoing electron and ion directions

Many ePIC subsystems utilize novel technologies which may be relevant for future nuclear and high-energy experiments. This presentation will provide an overview of the ePIC detector while highlighting several of these synergistic technologies.

Author: PAGE, Brian (Brookhaven National Laboratory)

Presenter: PAGE, Brian (Brookhaven National Laboratory)

Session Classification: Session 3