



Contribution ID: 63

Type: Oral

## Overview and performance of the ePIC Silicon Vertex Tracker

Tuesday, 27 February 2024 15:20 (20 minutes)

The Electron-Ion Collider (EIC) at the Brookhaven National Laboratory will allow to study the collisions of polarized electrons with polarized protons and ions. The measurement of scattered electrons and charged particles will provide the main ingredients to extract the physics information. The ePIC (electron-Proton/Ion Collider experiment) detector consists of barrel, forward, and backward detectors to achieve a precise tracking and particle identification over a wide pseudo-rapidity ( $|\eta| < 3.5$ ) coverage. The central tracking detector relies on three innermost silicon layers with a very small material budget ( $\sim 0.05\% X_0$  per layer), two silicon barrel layers (with  $\sim 0.25\%$  and  $\sim 0.55\% X_0$ , respectively), an inner micro-pattern gas detector (MPGD) layer ( $\sim 0.50\% X_0$ ) followed by a time-of-flight (TOF) layer ( $\sim 1.0\% X_0$ ) and an outer MPGD layer ( $\sim 1.50\% X_0$ ). Forward and backward disks allow the reconstruction of particles at larger  $\eta$ . The three innermost silicon layers are based on a new MAPS generation in 65 nm CMOS imaging technology being developed by ALICE ITS3. Barrel layers and disks will use a variation of such sensor with

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**Session Classification:** Hadronic Physics II

**Track Classification:** Hadronic Physics