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CyMBal: MPGDs for the ePIC detector at EIC

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R&D efforts are ongoing to develop the Cylindrical Micromegas Barrel Layer (CyMBaL) for the central region of the ePIC detector, the first experiment at the future Electron Ion Collider (EIC).

The Micromegas detectors will be a part of a multi-technology tracker that needs to fit inside a 1.7~T solenoid, bringing stringent constraints on space. Additionally, a low material budget is necessary to not degrade the measurements of the detectors behind. As such, a light resistive Micromegas equipped with a 2D readout is required. The goal is to optimise the readout system to limit the number of channels while keeping a spatial resolution of about $150\mu m$.

I will present the current status of the R&D and the results from the first prototypes tested.

session

A. Facilities and Detectors

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