Contribution ID: **259** Contribution code: **MOP052** Type: **Poster Presentation**

Design of a BPM pick-up for the EIC electron storage ring

Monday 11 August 2025 16:00 (2 hours)

A new beam position monitor (BPM) pick-up, compatible to operate reliably with the high current electron beams foreseen in the 5 - 18 GeV Electron Storage Ring (ESR) of the Electron-Ion Collider (EIC) project, is presented. We discuss a few design options for this button-style BPM pick-up with a focus on output signal levels, position characteristic, and wakefield effects. Regarding the octagonal cross-section geometry of the ESR vacuum chamber, the BPM pick-up analysis relies on numerical methods, here performed using the CST Studio software.

Please consider my poster for contributed oral presentation

Yes

Would you like to submit this poster in student poster session on Sunday (August 10th)

No

Footnotes

Funding Agency

Work supported by Brookhaven Science Associates, LLC under Contract No. DE-SC0012704 with the U.S. Department of Energy.

I have read and accept the Privacy Policy Statement

Yes

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Session Classification: Monday Poster Session

Track Classification: MC6 - Beam Instrumentation, Controls, AI/ML, and Operational Aspects