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Design and simulation of EIC IR orbit control system

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In the Electron Ion Collider (EIC), to be built at Brookhaven National Lab, the beams collide with a crossing angle of 25 mrad and an aspect ratio of 12 to 1. The orbit control in the interaction region is critical to achieve and to maintain the design luminosity and polarization, and to control synchrotron radiation induced detector background. In his report, the authors will introduce the IR orbit control system, including a slow orbit feedback and a fast local IR orbit feedback, and the associated simulation studies.

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Footnotes

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Yes

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