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Beam optics update for EIC HSR-IR2

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The Insertion Region 2 (IR2) will accommodate a Pre-Cooler at injection energy (24 GeV) and a Strong Hadron Cooling (SHC) facility at top energy (100 GeV and 275 GeV) in the Hadron Storage Ring (HSR) of the Electron-Ion Collider (EIC). This paper summarizes the lattice update in HSR-IR2 to meet the requirements from the Pre-cooling and the SHC. The layout has been changed to provide a longer cooling section. It also describes how to enable vertical cooling for the SHC in IR2.

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Footnotes

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Yes

Primary authors: XU, Derong (Brookhaven National Laboratory); BERGAN, William (Brookhaven National Laboratory); PEGGS, Steve (Brookhaven National Laboratory); WANG, Erdong (Brookhaven National Laboratory)

Co-authors: BERG, J. (Brookhaven National Laboratory); HOLMES, Douglas (Brookhaven National Laboratory); LIU, Chuyu (Brookhaven National Laboratory); LOVELACE III, Henry (Brookhaven National Laboratory); ROBERT-DEMOLAIZE, Guillaume (Brookhaven National Laboratory); GAMAGE, Bamunuvita (Thomas Jefferson National Accelerator Facility)

Presenter: LUO, Yun (Brookhaven National Laboratory)

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