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## Lattice design for Low Energy Cooling in EIC HSR-IR2

*Tuesday 12 August 2025 16:00 (2 hours)*

Insertion Region at two o'clock (IR2) of the Relativistic Heavy Ion Collider will be modified to provide effective cooling for the Electron-Ion Collider (EIC). This paper summarizes the update of the HSR-IR2 lattice design to meet the evolving requirements of the EIC. The geometry has been redesigned to satisfy the yellow-to-yellow configuration. The injection optics is optimized to satisfy the Low Energy Cooling requirements and physical aperture.

### Please consider my poster for contributed oral presentation

No

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

No

### Footnotes

### Funding Agency

### I have read and accept the Privacy Policy Statement

Yes

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**Session Classification:** TUP: Tuesday Poster Session

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