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EIC cooler injector space charge benchmark

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In this paper, we present the benchmark results of Bmad space charge tracking on the Electron-Ion Collider cooler injector lattice. Bmad, GPT, and Impact-T are compared in terms of accuracy and performance. We highlight the importance of space charge algorithm and demonstrate that the adaptive step size control improves the performance of Bmad space charge tracking.

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Footnotes

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Yes

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