

Development of Storage Ring Electron Cooler for High Energy Applications

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Electron cooling at high energy requires large average current in the cooling section (CS), which can be achieved by reusing the same electron beam on many passes through the CS. One of the options to realize such a cooling scheme is to use an electron storage ring with electrons being cooled by dedicated radiation damping wigglers. We will discuss the conceptual design of the 150 MeV Ring Electron Cooler as a potential future application for the Electron Ion Collider.

Footnotes

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