

# Electron Source Requirements of Electron Ion Collider

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electron sources will be developed to provide a polarized electron beam for collision and a high current unpolarized electron beam for electron cooling. The polarized electron source must provide two batches of four bunches. Each bunch must have a total charge of 5-7 nC and 85% polarization. The unpolarized electron source must provide 1-1.5 nC high brightness electron beam, with an average current of above 100 mA. This talk will discuss the requirements of both electron sources and current R&D activities in the EIC project.

**Presenter:** WANG, Erdong (BNL)