

## **The low $Q^2$ chicane and Compton Polarimeter at JLab EIC**

Alexandre Camsonne<sup>1</sup>, David Gaskell<sup>1</sup>, Joshua Hoskins<sup>2</sup> (presenting author underlined)

<sup>1</sup> Jefferson Laboratory

<sup>2</sup> University of Manitoba

The JLab Electron Ion Collider (JLEIC) has a chicane after the interaction region in order to detect electrons which have radiated a quasi-real photon. Such electrons stay close to the initial beam after emitting a photon and will be scattered out to be detected by the chicane. This allows to study photoproduction processes. The chicane configuration is also favorable for Compton Polarimetry allowing to cleanly separate the Compton electrons and photons. I will present the current layout of the forward electron detection and progresses in the design and development of the detector for the Compton Electron detector to be able to handle beam current up to 3A with a goal of sub-percent electron polarimetry.