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## Spin Physics at the Electron Ion Collider: The JLEIC Detector Concept

*Tuesday 27 September 2016 12:20 (25 minutes)*

A high luminosity polarized electron ion collider offers an unprecedented probe of the QCD dynamics of hadron and nuclear structure. I will present the JLEIC accelerator, interaction region, and detector design in the context of its impact on spin physics. The ion beams will include longitudinally and transversely polarized protons and  $^3\text{He}$ , as well as both vector and tensor polarized deuterons. The detector design emphasizes nearly hermetic acceptance, including a high resolution far forward spectrometer to identify deep exclusive and diffractive DIS events, the target fragmentation jet, and spectator fragments from light nuclei. Particle ID ( $e/\gamma/\pi/K/p$ ) is matched to the kinematics, to allow detailed flavor tagging in polarized SIDIS reactions.

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