## 2019 Meeting of the Division of Particles & Fields of the American Physical Society



Contribution ID: 382

Type: Oral Presentation

## JLEIC: A High Luminosity Polarized Electron-Ion Collider at Jefferson Lab

Thursday, 1 August 2019 14:40 (20 minutes)

A recent assessment by US National Academies of Science concluded that the science questions that could be answered by a US-based electron-ion collider are significant to advancing our understanding of the atomic nuclei that make up all visible matter in the universe. JLEIC, a polarized electron-ion collider, was proposed and studied at Jefferson Lab for this QCD frontier, utilizing the existing CEBAF SRF electron linac. The JLEIC machine design promises to deliver unrivaled performance in luminosity and polarization, and outstanding capabilities in detection, preeminent in nuclear physics for decades to come. In this talk we present a brief summary of the JLEIC design, and also highlight its accelerator R&D program.

Primary author: Dr ZHANG, Yuhong (Thomas Jefferson National Accelerator Facility)

Presenter: Dr ZHANG, Yuhong (Thomas Jefferson National Accelerator Facility)

Session Classification: Accelerators

Track Classification: Accelerators