DNP19-2019-000015

Abstract for an Invited Paper for the DNP19 Meeting of the American Physical Society

Critical Tests of QCD at the EIC¹

JIANWEI QIU, Jefferson Lab

Nuclear Physics community recommended a high-energy high-luminosity polarized EIC as the highest priority for new facility construction following the completion of FRIB in its 2015 Long-Range Plan. National Academy of Sciences provided "An Assessment of U.S.-Based Electron-Ion Collider Science" in 2018, finding the science that EIC will achieve is unique and world leading and will ensure global U.S. leadership in nuclear science, as well as in accelerator science and the technology of colliders. In this talk, I will briefly review specific measurements at the EIC that provide critical tests of our understanding of mass, spin, hadron structure, and emergent properties of dense systems in QCD.

¹This work is supported by the U.S. Department of Energy, Office of Science, Office of Nuclear Physics under contract DE-AC05-06OR23177, within the framework of the TMD Collaboration.