642nd ASRC Seminar

Date: Wednesday, August 3, 11:00 ~

Location: Room 116, KEK Tokai Building No.1

Speaker: Prof. Abhay Deshpande (Stonybrook University)

Title: Electron Ion Collider, the Next QCD Frontier: Physics Opportunities and Realization Challenges

Abstract: The US nuclear science advisory committee (NSAC), through its 2015 Long Range Planning activity in 2015, recommended that the Electron Ion Collider (EIC) be built in the US with highest priority as the new large facility for investigations in QCD after the completion of FRIB. The EIC, with appropriately designed experimental detectors, will enable unprecedented ability to explore the gluon-quark structure and dynamics of hadrons and nuclei, with emphasis on investigations of the gluons in them. It will also allow us to explore universal and fundamental aspects of QCD with the highest energy electron-nucleus collisions, that no other facility would allow us to.

In this talk, the science case will be presented along with the status and plans for the realization of the EIC. In the end, the opportunities to make a significant impact on the realization will be discussed with an invitation to contribute.

なお、今回のセミナーは、第52回「原子核ハドロン物理セミナー」を兼ねております。また KEK, J-PARC素粒子原子核セミナーとの共催です。セミナー内容は

http://silver.j-parc.jp/hadron/hadron_seminar/index.htmlでご覧になれます。



