XXVI International Workshop on Deep Inelastic Scattering and Related Subjects



Contribution ID: 161 Type: not specified

Status of the BELLE II experiment and early physics program

Thursday 19 April 2018 11:20 (20 minutes)

The Belle II experiment is a substantial upgrade of Belle detector and will operate at the SuperKEKB energy-asymmetric e^+e^- collider. The accelerator has successfully completed the first phase of commissioning; collisions will start early April 2018. The design luminosity is $8\times10^{35}~{\rm cm}^{-2}{\rm s}^{-1}$ and the Belle II experiment aims to record 50 ab⁻¹ of data, a factor of 50 more than the Belle experiment. This large data set will be accumulated with low backgrounds and high trigger efficiency in a clean e^+e^- environment; it will allow to probe New Physics scales that are well beyond the reach of direct production at the LHC, and will complement the searches through indirect effects that are currently ongoing or planned. This talk will review the detector upgrade, and present the early physics program, centered on bottomonium studies..

Primary author: HIGUCHI, Takeo (KEK)

Co-author: PERUZZI, Ida (Laboratori Nazionali di Frascati dell'INFN)

Presenter: HIGUCHI, Takeo (KEK)

Session Classification: WG7: Future of DIS

Track Classification: WG7: Future of DIS