Contribution ID: 134 Type: Talk

Outlook on Neutrino Cross Sections in the next generation of Neutrino Oscillation Experiments

Monday 18 May 2009 09:30 (45 minutes)

Following the establishment of neutrino oscillations using both astrophysical and terrestrial neutrino sources, we look forward to an exciting era when precision and high-sensitivity probes will refine our understanding of neutrino oscillations and elucidate their relationship to some of the "Big Questions" that confront the field of particle physics as a whole. Among these include the origins of flavor mixing and masses, why they are so dramatically different in the lepton and quark sectors, and the persistent puzzle of the source of the matter/anti-matter asymmetry of the Universe.

As the projected precision of neutrino oscillation experiments increase, we will rely increasingly on our knowledge and understanding of neutrino-nucleus interactions. As a result, the ongoing collaboration between different

communities that is at the heart of the NuInt Workshops will only become more important.

Author: Mr TANAKA, Hirohisa A. (University of British Columbia/Institute of Particle Physics)

Presenter: Mr TANAKA, Hirohisa A. (University of British Columbia/Institute of Particle Physics)

Session Classification: Motivation I

Track Classification: Motivation