



ID de Contribution: 65

Type: **Oral presentation**

## The time-of-propagation counter for Belle II

*mercredi 5 mai 2010 14:30 (30 minutes)*

The Belle II detector operating at the future upgrade to the KEKB accelerator will perform high-statistics precision investigations into the flavor sector of the Standard Model. As charged hadron identification is a vital element of the experiment's success, the time-of-propagation (TOP) counter has been chosen as the primary particle identification device in the barrel region of Belle II. The TOP counter is a compact variant of the DIRC technique and relies heavily on exquisite single photon timing resolution with micro-channel plate photomultiplier tubes. We discuss the general principles of TOP operation and optimization of the Belle II TOP configuration, which is expected to provide 4 sigma or better separation of kaons and pions up to momenta of approximately 4 GeV/c.

**Please indicate "poster" or "plenary" session. Final decision will be made by session coordinators.**

plenary

**Auteur principal:** M. NISHIMURA, Kurtis (University of Hawaii)

**Orateur:** M. NISHIMURA, Kurtis (University of Hawaii)

**Classification de Session:** Novel Cherenkov imaging techniques

**Classification de thématique:** Novel Cherenkov imaging techniques