

Backgrounds studies for the COMET Phase-I and Phase-II

Friday 29 August 2014 16:00 (30 minutes)

The COMET experiment will search the muon to electron conversion, which violates lepton-flavor conservation, with a phased approach. The first stage, COMET-Phase-I, will achieve a single event sensitivity of 3×10^{-15} with a short muon transport solenoid and a cylindrical detector system. Then in the stage two, COMET Phase-II, finally achieves the sensitivity of 3×10^{-16} with a long C shape muon transport solenoid and a curved solenoid spectrometer system. We plan to start the data taking from 2016 and 2019 for Phase-I and Phase-II, respectively. Construction COMET experimental hall and detector are currently underway as well as detailed simulation studies. In this presentation, status and results of backgrounds studies will be reported.

WG3: Accelerator Physics (Yes/No)

No

WG2: Neutrino Scattering Physics (Yes/No)

No

WG4: Muon Physics (Yes/No)

Yes

WG1: Neutrino Oscillation Physics (Yes/No)

No

Type of presentation

Oral presentation

Author: SATO, Akira (Osaka University)

Co-author: Mr WU, Chen (Nanjing University)

Presenter: SATO, Akira (Osaka University)

Session Classification: WG4: Muon Physics and High Intensity applications