

Search for Muon to Electron Conversion at J-PARC - COMET Experiment

Tuesday, September 28, 2021 10:15 AM (20 minutes)

COMET is an experiment at J-PARC, Japan, which will search for neutrinoless conversion of muons into electrons in the field of a nucleus ($\mu^- + N \rightarrow e^- + N$); a lepton flavor violating process. The experimental sensitivity goal for this process is order of 10^{-15} for Phase-I and 10^{-17} for Phase-II experiment, which is a factor of 100–10,000 improvements correspondingly over existing limits. Recent progresses in facility and detector development are presented, along with COMET Phase-I and Phase-II experimental schedule. The physics and feasibility of searching lepton number violation in the COMET experiment will be also discussed.

What is your topic?

CP and T violation

Author: LEE, MyeongJae (Institute for Basic Science (Korea))

Presenter: LEE, MyeongJae (Institute for Basic Science (Korea))

Session Classification: Session 2b: Test of fundamental symmetries with tau lepton

Track Classification: Tau2021 Abstracts