

Invitation LMU-Seminar

Title: Recent progress on negative muon programs in Japan

Speaker: Prof. Akira Sato

Osaka University, Japan

Time: Tuesday, March 5th 2019, 13:30

Place: WBGB/021

Abstract:

Experiments using negative muons have recently attracted a great deal of attention in Japan. There are two working muon facilities in Japan: the muon science facility (MUSE) of the Japan Proton Accelerator Research Complex (J-PARC) in Tokai and MUon Science Innovative muon beam Channel (MuSIC) located at Research Center of Nuclear Physics (RCNP) in Osaka.

The J-PARC-MUSE provides pulsed muon beams, while the RCNP-MuSIC is a DC muon beam facility. Many experiments, which utilize negative muon beams, have been performed at these facilities in the last several years. For example, non-destructive measurements of element and isotope ratio in objects with muonic X-rays and basic studies on the muon nuclear transmutation were actively studied. We also trying to adopt/develop new detector technologies and methods to improve the performance of the negative muon programs.

In this seminar, I will introduce recent progress on the negative muon programs in Japan by covering their status and prospects.