



Invitation

LMU-Seminar

Title: EMuS - the First Experimental Muon Source in China

Speaker: Dr. Yu Bao
Institute of High Energy Physics (IHEP)

Time: Thursday, August 16th 2018, 14:00

Place: WBGB/019

Abstract:

We report the research and development of the Experimental Muon Source (EMuS) project in China. Based on the 1.6 GeV/100 kW proton accelerator at the Chinese Spallation Neutron Source (CSNS), EMuS will extract one bunch from every 10 double-bunch proton pulses to hit a stand-alone target sitting in a superconducting solenoid, and the secondary muons/pions are guided to the experimental area. A staging strategy is developed based on possible funding support. The beamlines are designed to provide surface muon beams and a high-energy decay muon beam, so that various experiments such as muSR applications, particle/nuclear physics experiments and muon imaging applications can be conducted.

Speaker: Dr. Yu Bao is an associate scientist at Institute of High Energy Physics (IHEP). He did his PhD at Max Plank Institute for Physics and IHEP. From 2011 to 2013, he conducted the muon longitudinal compression at PSI, which is the first experimental test of the MuCool project. From 2013 to 2017, he joined the Muon Accelerator Program in the US and designed the muon bunch merge and final cooling sections for the future Muon Collider. Since 2017 he came back to IHEP to join the muon group and is currently leading the beamline design of EMuS.