

**Seminarium Studium Doktoranckiego NCBJ**  
**Poniedziałek, 28 stycznia, godzina 9:00**  
**Sala 22 w NCBJ, Hoża 69**

**Speaker: Grzegorz Żarnecki**

**Title: T2K results on CP violation in the neutrino sector**

Abstract: Each of the three flavour states of neutrinos is a superposition of mass eigenstates. The flavour-mass mixing matrix may have an irreducible imaginary component resulting in possible CP symmetry violation in neutrino oscillations, i.e. asymmetries between neutrino and antineutrino oscillations. In the T2K experiment the CP is probed by the measurement of appearance probability of electron (anti)neutrinos originating from accelerator-produced muon (anti)neutrinos beam. Current T2K results indicates CP violation at 2 sigma confidence level.