nuTURN2012 - Neutrino at the Turning Point

Tuesday, 8 May 2012 - Thursday, 10 May 2012 INFN - Laboratori Nazionali del Gran Sasso

Scientific Programme

Daya Bay has recently observed a large theta_13 neutrino mixing angle which confirms the early results from T2K, Double-Chooz and MINOS, as well as from global neutrino data analyses. This finding offers an unprecedented opportunity to study the leptonic mixing matrix with artificial neutrino beams, addressing the major challenges in this field, as the occurrence of CP violation in the leptonic sector, the determination of the neutrino mass hierarchy and the measurement of theta_23, already. The meeting will evaluate the experimental perspectives of such a "large theta_13" scenario. The talks and discussions will target the opportunities offered by the existing and new facilities, and in particular, by the long-baseline experiments. A principal aim is to clarify which type of neutrino beams, detectors and which laboratories are best suited to investigate the neutrino properties, in order to outline a realistic European roadmap for the next decade.

Please check workshop agenda in the "Timetable" section.