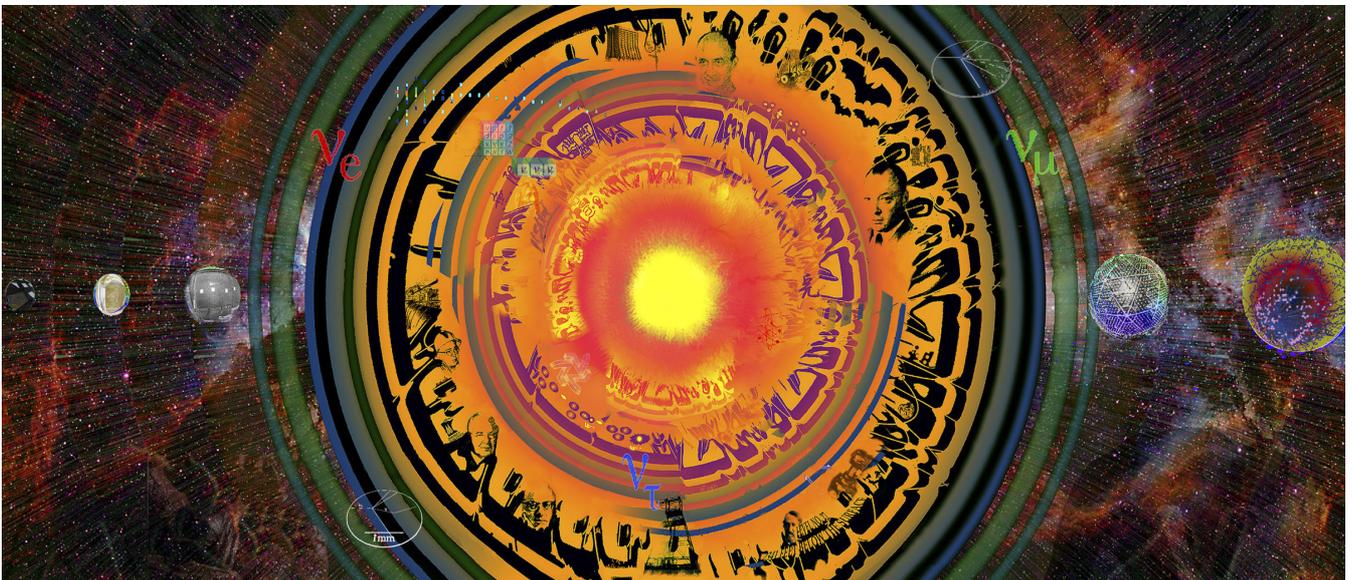


## New Results from Long Baseline Neutrino Oscillation Experiments

Alfons Weber (Oxford U and RAL)

Tuesday, 6 September 2011, 16:00 h  
DESY Auditorium, Hamburg



While all eyes are turned to the LHC expecting the discovery of the Higgs boson or new physics, it has often been forgotten that physics beyond the standard model has long been discovered in the neutrino physics. Over the last two decades there was mounting evidence coming from experiments measuring solar and atmospheric neutrinos that neutrinos undergo flavour transitions and therefore have to have mass. Most of the data indicates that these transitions are driven by neutrino oscillations, which are caused by the fact that neutrino mass- and flavour-eigenstates are not identical. The last few years have seen precision measurements of these transitions, which allowed the determination of the neutrino mixing angles of the so-called PMNS matrix, which is the neutrino equivalent of the well-known CKM matrix of the quark sector. The seminar will summarise the latest oscillation measurements coming from the accelerator based long-baseline oscillation experiments MINOS and T2K.

- Coffee, tea and cookies will be served at 15:45 h.
- After the seminar there is a chance for private discussions with the speaker over soft drinks and pretzels

<https://physikseminar.desy.de/hamburg>

Accelerators | Photon Science | Particle Physics

Deutsches Elektronen-Synchrotron  
A Research Centre of the Helmholtz Association

