



## Measurement of $\theta_{13}$ in Neutrino Oscillation Experiments.

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## Tuesday, 21 January 2014, 16:45 h DESY Auditorium

Neutrino oscillations are described by a mixing matrix connecting the weak and the mass eigenstates of the three neutrino flavours. It contains three mixing angles,  $\theta_{12}$ ,  $\theta_{23}$ ,  $\theta_{13}$ , from which  $\theta_{13}$  has only recently been determined by oscillation experiments both at reactors and accelerators. The talk presents these experiments, focussing on the reactor experiment DoubleChooz and the accelerator experiment T2K. Combining the results from reactor and accelerator experiments yields sensitivity on the CP-violating parameter  $\delta_{CP}$  of the lepton sector (see figure). Finally, expectations on future sensivities on the neutrino oscillation parameters are briefly summarized.



Accelerators | Photon Science | Particle Physics

Deutsches Elektronen-Synchrotron A Research Centre of the Helmholtz Association Coffee, tea and cookies will be served at 16:30h

After the seminar there is a chance for private discussions over wine and pretzels

