

DNP10-2010-020046

Abstract for an Invited Paper
for the DNP10 Meeting of
the American Physical Society

θ_{13} Measurements

ROBERT SVOBODA, UC Davis

The measurement of the neutrino mixing angle θ_{13} is a priority for neutrino physics, as it is necessary to know this parameter to achieve full sensitivity for resolving the neutrino mass hierarchy and for searching for CP violation in the neutrino sector. A value of $\sin^2 2\theta_{13}$ of less than 0.01 would require facilities beyond the scope of some planned new neutrino experiments. Current information on θ_{13} from reactor, atmospheric neutrinos, and accelerator experiments is reviewed, and a status report is given on new experiments under construction.