



Monday 4 July, 12:20 – 12:45

Session 2: Three-flavour mixing: the Standard Neutrino Model

**New atmospheric and solar results from Super-Kamiokande**

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The Super-Kamiokande experiment has accumulated atmospheric neutrino and solar neutrino events and has made improvements in their measurement over the last 20 years. With the atmospheric neutrino data, precise measurements of mixing angles and mass squared difference, and a study on the mass hierarchy, leptonic CP violation are being performed. Neutron tagging and tau-neutrino identification are introduced to improve sensitivity on these studies. The observation of solar neutrinos provides precise measurements of their energy spectrum and terrestrial matter effects. With a recent improvement, the solar neutrino measurement has a full efficiency at 3.5MeV electron kinetic energy. This reduces the systematic error of the efficiency at that energy range. New results on atmospheric and solar neutrino analyses based on all SK data set will be presented.