

Theory Predictions for Neutrino Masses and Mixing Angles

Tuesday, September 15, 2009 11:00 AM (30 minutes)

I will review recent developments in theoretical models for neutrino masses and mixing. Emphases are given to models based on finite group family symmetries in which Tri-bimaximal neutrino mixing pattern is generated. In particular, I will describe one recent model based on grand unification, in which both the Tri-bimaximal neutrino mixing and realistic CKM matrix are generated. The prediction for θ_{13} is given in terms of the Cabibbo angle and it is within the reach of Daya Bay experiment. CP violation in this model is purely geometrical in origin. Since the only non-vanishing leptonic CP phase is the Dirac phase, the model predicts a connection between the leptogenesis and CP violation in neutrino oscillation.

Primary author: CHEN, Mu-Chun

Presenter: CHEN, Mu-Chun

Session Classification: DG3 - Neutrino Physics

Track Classification: Neutrino Physics