

Department of Theoretical Physics

Special Free Meson Seminar

- Speaker* : Ketan Patel
(PRL, Ahmedabad)
- Topic* : Fermion Masses in SO(10) Models
- Day, Date & Time* : Tuesday, December 20, 2011
at 4:00 p.m.
- Place* : Theoretical Physics
Seminar Room (A304)

Abstract

SO(10) grand unified theory which unifies strong and electroweak interactions also provides a constrained and unified description of the fermion masses and mixing angles. In this talk, I will review many SO(10) models and will discuss their viability in explaining all the fermion masses and mixing angles. The supersymmetric and non-supersymmetric versions of minimal, non-minimal and flavor symmetric SO(10) models and their consequences on the fermion mass spectrum will be discussed. Several interesting observations like the possible origin of differences in the flavour mixing patterns of quarks and leptons and predictions for the reactor angle and leptonic CP violating phases will be outlined in each case.

(Nilmani Mathur)