

# Department of Theoretical Physics

## Free Meson Seminar

<i>Speaker</i>	:	Probir Roy (Saha Institute of Nuclear Physics, Kolkata)
<i>Topic</i>	:	Neutrino masses and leptogenesis from mu-tau symmetric four zero Yukawa textures
<i>Day, Date &amp; Time</i>	:	Thursday, March 17, 2011 at 2:30 p.m.
<i>Place</i>	:	Theoretical Physics Seminar Room (A304)

### *Abstract*

After a brief review of mu-tau symmetric four zero Yukawa textures within the type I seesaw, we will demonstrate the emergence of consequent neutrino masses, Majorana phases and CP violation. The generation of the baryon asymmetry of the Universe via leptogenesis will be discussed. It will be shown how, depending on the mass hierarchy of the heavy singlet neutrinos, it resolves the quadrant ambiguity of the single phase in the allowed Yukawa textures in a robust way.

*(Amol Dighe)*