Area Seminar

Title	Light neutrinos from massless texture and below TeV seesaw scale
Date and Time	18/11/2010 16:00:00
Speaker	Prof. Amitava Raychaudhuri Professor HRI, Allahabad
Area	Theoretical Physics
Venue	Room No. 469
Abstract	If there is new physics around the TeV scale the Type I seesaw mechanism for small neutrino mass requires fine-tuned cancellation among different contributions to the neutrino mass matrix. We generalize the possible structures of the 6 x 6 neutrino mass matrix for which neutrinos are massless in the tree approximation and such cancellations are possible. We discuss the possible symmetries for such structures of the mass matrix. Finally, we illustrate how symmetry breaking and loop corrections may lead to small neutrino masses. A seesaw scale below TeV for right-handed Majorana neutrinos might thus be admissible.