

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE
2A&B, Raja S.C. Mullick Road, Jadavpur, Kolkata-700032, India

Seminar Notice

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Theoretical Physics Department

Title:	Partially compressed Supersymmetric spectra with sneutrino Dark Matter
Speaker:	Subhadeep Mondal, University of Helsinki and Helsinki Institute of Physics, Finland
Date:	June 01, 2018 (Friday)
Time:	3:00 p.m.
Venue:	Theoretical Physics Seminar Room (C406), 3rd Floor, Centenary Building, IACS
Abstract:	Dark Matter direct detection results severely constrain a light right-handed sneutrino Dark Matter (DM) scenario. These constraints can be avoided by making the Dirac neutrino Yukawa coupling sufficiently small which results in large relic abundance. Thus the sneutrino must co-annihilate with other sparticle(s) to produce correct relic density. This gives rise to a compressed electroweak sector which has impacts on the generic search strategies of such models at the LHC. We have studied such compressed supersymmetric spectra in the context of inverse seesaw and Left-Right symmetric models and found some novel signal regions which are characteristic to these scenarios.

All are cordially invited to attend the seminar