

ICTS Colloquium

- Title : The hierarchy problem and physics beyond the standard model
- Speaker : Gautam Bhattacharyya, Saha Institute of Nuclear Physics, Kolkata
- Date : Monday, October 17, 2016
- Time : 3:00 pm
- Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore
- Abstract : Why the Higgs boson mass is at the electroweak scale and not at the GUT or Planck scale constitutes what is called the 'hierarchy problem'. I will discuss how attempts to cure this problem have fueled various speculations of physics 'Beyond the standard model (BSM)'. I will briefly touch upon the electroweak precision measurements to highlight how we got clues about the Higgs mass from there. Then in specific BSM contexts, I will discuss how fine-tuned supersymmetry is (specifically after the Higgs discovery), and comment on the status of the 'alternative' avenues leading to electroweak symmetry breaking (like 'little Higgs' or 'composite Higgs').