

Area Seminar

Title Study of Vacuum Stability in Seesaw Models

Date and Time 28/05/2012 16:00:00

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Area Theoretical Physics

Venue Room No. 469

Abstract ATLAS and CMS collaborations have narrowed down the allowed range of Higgs mass to the region 115-131 GeV. Additionally there are hints of the Higgs mass being near 125 GeV. Once this discovery is verified, we can investigate the impact of 125 GeV Higgs boson on the search of new physics beyond the Standard Model. We have taken into account the vacuum stability corresponding to a 125 GeV Higgs boson and studied its implication on Seesaw scale. In this talk, I will discuss the vacuum stability implication on Higgs mass, and Seesaw scale. We have studied the TeV scale seesaw mechanism, which can be probed at LHC and we can put bounds on the light neutrinos masses by demanding vacuum stability of 125 GeV Higgs in such models.