

Area Seminar

Title Invisible decays of the lightest Higgs boson in supersymmetric models

Date and Time 28/11/2013 16:00:00

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Area Theoretical Physics

Venue Room no. 469

In various supersymmetric models the lightest Higgs scalar can decay invisibly consistent with the constraints on the 126 GeV state discovered at the CERN LHC. I will briefly state the status of the invisible decays in the light of recent LHC data on SUSY and Higgs. Then I will mainly focus on the implications of these observations for the neutralino sector in the minimal supersymmetric standard model (MSSM), as well its extension containing an additional chiral singlet superfield, the so-called next-to-minimal or nonminimal supersymmetric standard model~(NMSSM), with both universal as well as nonuniversal gaugino masses at the grand unified scale.