The XXIX International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2022)



Contribution ID: 76 Type: not specified

Trilinear Higgs self-coupling in supersymmetric models

Friday, 1 July 2022 19:20 (20 minutes)

The Higgs self-coupling is the only Standard Model parameter that has not been measured directly. On the other hand the self-coupling is related to the Higgs mass. In the MSSM the Higgs self-coupling is practically fixed and hence allows no large deviations from the SM, while nonminimal models can have different ways of achieving the 125 GeV Higgs mass, which can then lead to a non-SM-like Higgs self-coupling. I shall discuss which models allow a larger or smaller Higgs trilinear coupling and what would these mean for di-Higgs production.

Primary author: WALTARI, Harri

Presenter: WALTARI, Harri

Session Classification: Higgs theory and experiment