## New Physics Directions in the LHC era and beyond



Contribution ID: 55

Type: Invited Talk

## Semisymmetries in 2HDM

Tuesday 23 April 2024 12:00 (30 minutes)

The Two Higgs Doublet Model invariant under the gauge group SU (2)  $\times$  U (1) is known to have six additional global discrete or continuous symmetries of its scalar sector. We have discovered regions of parameter space of the model which are basis and renormalization group invariant to all orders of perturbation theory in the scalar and gauge sectors, but correspond to none of the hitherto considered symmetries. We therefore identify seven new symmetries of the model and discuss their phenomenology.

Presenter: GRZADKOWSKI, Bohdan

Session Classification: Morning