

## Semisymmetries in 2HDM

*Saturday 4 May 2024 12:20 (20 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:** Talks