

Scalars 2017



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Two Higgs doublets as pseudo Nambu-Goldstone bosons

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Content :

We discuss composite two Higgs doublet models based on the global symmetry breaking $SO(6)$ to $SO(4)*SO(2)$. We construct two Higgs doublets emerging from 8 pseudo Nambu-Goldstone bosons, and then show how the scalar potential is generated through the Coleman-Weinberg mechanism at one-loop level.

We also show several phenomenologically viable scenarios, a mass spectrum of Higgs bosons, their couplings to SM fields and branching ratios, which are predicted by fundamental parameters in a composite sector.

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