

# Scalars 2015

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## The most bizarre two-Higgs doublet model ever

**Content :**

The Lee-Wick Standard Model is a highly constrained two-Higgs model, with one parameter determining all additional masses and mixing angles. It also solves the gauge hierarchy problem. However, it contains states with negative norm, i.e. negative widths, i.e. they decay before they are produced. Nonetheless, the model appears to be unitary and macroscopically causal. The model will be reviewed, and an extension to the Lee-Wick two-Higgs doublet model will be presented.

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