

# Scalars 2019



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## Global fits in the coloured scalar model

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### Content :

In this work we study the phenomenological constraints to the parameter space of scalars carrying color quantum numbers. Specifically we constrain the Manohar-Wise model based on the addition of a  $SU(2)$  double and  $SU(3)$  octet to the minimal Higgs model. The fits are performed using the open source HEPfit package. We include both theoretical constraints, such as unitarity and perturbativity, and experimental constraints, like the ones coming from flavour and electroweak observables. For the first time we combine all these results and we are able to constrain the parameters of the potential, the Yukawa couplings and the masses of the scalars.

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