Contribution ID: **18**   Type: **not specified**

Aligned two Higgs doublet model and the global fits

Aligned two Higgs doublet model (ATHDM) is one of the simplest extensions of the Standard Model (SM). It assumes the existence of two scalar doublets with similar Yukawa structure. This assumption forbids undesirable flavour changing neutral currents (FCNCs) at tree level without imposition of any Z_2 symmetry. A2HDM also provides the opportunity to study different varieties of 2HDMs under a generic framework. Here, we demonstrate a global fit of A2HDM with the help of the package HEPfit, that relies on bayesian approach, using various theoretical and experimental constraints on the model.

Primary author: KARAN, Anirban

Co-authors: COUTINHO, Antonio (IFIC (CSIC –UV));   Prof. PICH, Antonio (IFIC (CSIC –UV));   MIRALLES, Victor (University of Manchester)

Presenter: KARAN, Anirban