Contribution ID: **75** Type: **Working Group Sessions**

Constraining Higgs couplings using Bs -> mu mu

Friday, 23 June 2017 09:45 (25 minutes)

We study constraints and implications of the recent LHCb measurement of Bs -> mu mu for tree-level Higgs-mediated flavor-changing neutral current (FCNC) interactions. Combined with experimental data on Bs mass difference , the h -> mu tau, and the h -> tau tau decay branching ratios from the LHC, we find that the Higgs FCNC couplings are severely constrained. Current data allow large CP violation in the h -> tau tau decay. Consequences of the Cheng-Sher ansatz for the Higgs Yukawa couplings are discussed.

Primary author: Prof. HE, Xiao-Gang (National Taiwan University, National Center for Theoretical Science, Shanghai Jiao Tong University,)

Co-authors: Prof. CHIANG, Cheng-Wei (National Taiwan University, Academia Sinica, National Center for Theoretical Sciences); Dr YE, Fang (National Taiwan University); Dr YUAN, Xing-Bo (National Center for Theoretical Sciences)

Presenter: Dr YUAN, Xing-Bo (National Center for Theoretical Sciences)

Session Classification: Joint Working Group: Electroweak / Flavor and Precision

Track Classification: Joint Working Group Electroweak / Flavor and Precision