

Higgs coupling with bottom and top quarks: from discovery to measurement

Tuesday, 17 August 2021 11:10 (15 minutes)

Discovery of the Higgs boson in 2012 completed the Standard Model of particle physics. Measurement of this newly discovered Higgs boson properties examines the SM electroweak theory, and would also shed light for physics in beyond. Its coupling to the third generation quarks plays leading role not only because Higgs to bottom-quark pair having largest decay branching ratio, but also Higgs-top Yukawa coupling being the largest one among all fermions. Direct evidences of Higgs coupling to bottom and top quarks were observed in 2018. After which, the couplings as well as production and decay cross sections have been measured in discovery channels with full Run 2 luminosity. This talk will present recent updates from ATLAS experiment.

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Session Classification: Parallel Session I: TeV and BSM Physics

Track Classification: 1. TeV 物理和超出标准模型新物理