



Contribution ID: 208

Type: **not specified**

NLO SUSY-QCD Corrections to Pseudoscalar Production via Gluon Fusion

Friday 27 August 2021 17:20 (20 minutes)

In this talk I will present the genuine SUSY-QCD corrections to the production of the pseudoscalar Higgs boson in the Minimal Supersymmetric Standardmodel (MSSM). These corrections have been numerically calculated with no expansion in the mass ratios. A comparison to existing approximations is done in order to see how significant the effects beyond these approximations are. The (consistent) treatment of γ_5 is discussed. The genuine SUSY-QCD corrections can be large in several MSSM benchmark scenarios and are supplemented by sizeable contributions beyond the previously known approximations.

Authors: BAGNASCHI, Emanuele Angelo (Paul Scherrer Institute (CH)); FRITZ, Lukas (Paul Scherrer Institut); SPIRA, Michael (Paul Scherrer Institute (CH)); MÜHLEITNER, Milada Margarete; LIEBLER, Stefan Rainer (KIT - Karlsruhe Institute of Technology (DE)); NGUYEN, Thanh Tien Dat (ICISE)

Presenter: FRITZ, Lukas (Paul Scherrer Institut)

Session Classification: Electroweak, Top quark, and Higgs Physics

Track Classification: Electroweak, Top quark, and Higgs Physics