FAKULTÄT für PHYSIK LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN/GARCHING

PHYSIK-DEPARTMENT TECHNISCHE UNIVERSITÄT MÜNCHEN MÜNCHEN/GARCHING

MLL-KOLLOQUIUM

Donnerstag, 05.07.2018, 16¹⁵ Uhr

Hörsaal der LMU in Garching, Am Coulombwall 1 Treffen zum gemeinsamen Kaffee 16 Uhr

Prof. Stefano Pozzorini

(Univ. of Zurich, Switzerland)

Precision Monte-Carlo-Simulations in the Top-Quark Sector

The investigation of top quarks is one of the main pillars of the physics program of the LHC. The high statistics and quality of the LHC data allow for precision tests of the properties and strong interactions of top quarks, as well as for first measurements of its weak and Yukawa couplings. Top-quark production plays also a key role as background in a multitude of searches of physics beyond the standard model. This talk deals with recent developments in the theoretical description of top-quark production and decays at the LHC. In particular, I will present state-of-the art Monte Carlo generators that play an important role for precision measurements of the top-quark mass and in the context of the recently discovered $t\bar{t}H$ process.

gez. Peter Thirolf Tel. 289-14064 gez. Norbert Kaiser Tel. 289-12367