



Einladung zum Vortrag

“Precision as a tool to discover New Physics at the LHC”

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Termin: Freitag, 24.05.2019, 15:20 Uhr

Ort: Lise-Meitner-Hörsaal
9. Boltzmanngasse 5, 1. Stock

Abstract:

With the lack of direct evidence for physics beyond the Standard Model at the Large Hadron Collider, precision has become of foremost importance even at a hadron collider. Indirect searches provide an excellent chance to probe New Physics through tiniest deviations from Standard-Model predictions. I will discuss recent developments on the theoretical side, showing the importance of high-precision predictions, in particular, related to vector-boson pair production processes. I will then focus on advancements in theoretical predictions, which are necessary to match the experimental demands. These involve highest-precision QCD and EW corrections, their inclusion in LHC event simulations, and the characterization of New-Physics effects via effective field theory, which highlight my current and future research activities.

**Im Rahmen des Vortrages findet eine Lehrprobe zum Thema
„Periodic Potentials in Quantum Theory“ statt.**