



Einladung zum Vortrag

**“Challenges and opportunities at hadron colliders –
An exciting era in fundamental particle physics”**

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Termin: Montag, 20.05.2019, 16:10 Uhr

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

Abstract:

The Standard Model of particle physics is a beautiful theory that describes the properties and interactions of the fundamental components of the matter around us. Collider experiments allow to probe its validity at an increasingly high accuracy. This task is particularly important in the sector responsible for the breaking of the electroweak symmetry, whose exploration started with the discovery of the Higgs boson. We need to perform accurate studies of the properties of this particle and compare the very precise measures that the LHC will deliver with equally precise theoretical predictions. I will outline some of the recent, most important achievements in precision QCD calculations for Higgs physics I contributed to, discuss which further studies are needed and how they can be tackled.

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