Fakultät für Physik
DER UNIVERSITÄT WIEN
Arbeitsbereich Teilchenphysik
A-1090 WIEN, BOLTZMANNGASSE 5, AUSTRIA

universität wien

EINLADUNG

im Rahmen des Teilchenphysikseminars

zum Vortrag

von

Peter Stoffer

University of California, San Diego

über

„Hadronic effects and effective field theories at the precision frontier“

Abstract:
Traditionally, low-energy precision experiments have taken a complementary role to direct searches for physics beyond the Standard Model (SM) at high-energy colliders. The absence of direct signals of new physics at the LHC makes it plausible that particles beyond the SM are much heavier than the electroweak scale. Therefore, collider experiments also play the role of precision indirect searches. Effective field theories (EFTs) provide a model-independent unified framework for describing and constraining new physics in experiments from LHC energies down to the hadronic scale.
The increasing precision at the experimental frontier calls for a better control of theory uncertainties, which at low energies are usually dominated by non-perturbative hadronic effects. Theoretical progress is required both in the description of hadronic SM contributions, as well as in the EFT description of new physics. I will present my work and future plans in the subjects of the muon anomalous magnetic moment, lepton-flavor- and CP-violating low-energy observables, and the EFT framework.

Zeit: **Mittwoch,** 11.12.2019 **16:15**

Ort: Kleiner Seminarraum, Boltzmanngasse 5, 5. Stock

gez.**:** A. Hoang, S. Plätzer, M. Procura