Gudrun Heinrich – HEP seminar – October 12, 221 Karlsruhe

Title: "Collider Physics at the Precision Frontier"

Abstract: We are currently in an era of collider physics where precision phenomenology is particularly important.

In the first part of this talk we will motivate precision calculations from various perspectives and review some recent developments concerning precision phenomenology in the Higgs sector.

The second part of the talk will focus on Higgs boson pair production. In particular, we will discuss the effects of anomalous couplings and illustrate how they can be constrained from observables like the Higgs boson pair invariant mass spectrum.