GSI - FAIR Colloquium

Main Lecture Hall (SB1 1.120), 64291 Darmstadt, Planckstraße 1

Tuesday, May 10, 2016,
16:15 Uhr (Tee ab 15:45)

Pre-colloquium for students at 15:30

Sinead Ryan - Trinity College - Dublin

Understanding the QCD spectrum: progress and prospects from Lattice QCD

A key goal in particle and nuclear physics is to understand how the spectroscopy, structure and interaction of hadrons emerge from QCD. Recent experimental results have shown that there is a rich spectrum of, sometimes unexpected, states beyond the predictions of quark models. Lattice QCD provides a theoretical framework to make precise, quantitative predictions of hadronic properties from first principles. In this talk I will describe the current state-of-the-art in lattice calculations, highlighting the dramatic progress made in recent years. I will discuss results for hybrid and exotic states as well as progress and prospects for scattering and resonance calculations on the lattice.

Einladende: Silvia Masciocchi

GSI Helmholtzzentrum für Schwerionenforschung GmbH