

IMPRS EPP

**Block Course
of the
International Max Planck Research School
on Elementary Particle Physics**

March 16th to 18th, 2016

Max Planck Institute for Physics

Lectures:

Wednesday, March 16th from 10:30 - 12:00, seminar room 313

Thursday, March 17th from 10:30 - 12:00, seminar room 313

Friday, March 18th from 10:30 - 12:00, main auditorium

Lecturer: Dr. Gionata Luisoni

CERN, Theory Division

Introduction to resummation in QCD

Sometimes the appearance of multiple scales in perturbative QCD calculations, renders them unreliable and poorly convergent at any finite order. In this cases an all-order re-organization of the perturbative expansion is necessary to obtain reliable theoretical predictions: this is the key motivation for resummation. In this course I will give an introduction to resummation in QCD, explaining what is resummed and how resummation can be achieved, focussing also on the impact of resummed results on physical observables and phenomenology.

No registration needed.