



Block Course on Detector Physics (I)
of the
International Max Planck Research School
on Elementary Particle Physics

June 23rd & 24th, 2016
10:30 – 11:55 AM

Max Planck Institute for Physics, main auditorium

Lecturer: Dr. Frank Simon

CALORIMETERS

The measurement of particle energies with calorimeters is a crucial part of particle physics experiments, and is highly relevant in other disciplines ranging from astroparticle physics to modern medical diagnostics. Ongoing technological developments are changing these devices, from rather coarse detectors to highly granular precision instruments. Novel measurement and reconstruction approaches promise improved energy resolution, and the addition of precise timing increases the spatial resolution in medical imaging and turns particle physics calorimeters into 4D detectors with powerful background rejection capabilities.

The lectures will give an introduction to the art of energy measurement of electromagnetic and hadronic particles, discuss the basic technological principles of calorimetry and present the current state of the art of systems currently in development and construction.

No registration needed.