



LECTURE COURSE IN THE QUANTUM UNIVERSE RESEARCH SCHOOL

Summer Term 2019

Teilchenphysik und der Large Hadron Collider: Beschleuniger, Detektoren und Physik

E. Gallo, P. Gunnellini, J. Haller, G. Kasieczka, R. Kogler

Course Description:

The course will make an excursion through the Physics at the Large Hadron Collider at CERN. First the accelerator complex and the ATLAS and CMS detectors will be explained in detail. Then the basics of a proton proton collision will be introduced. The physics topics will cover very recent results on jets, W and Z production, top and Higgs boson. The course will end with searches for new physics beyond the SM, in particular for Supersymmetry, and with future projects in high energy physics.

Prerequisites:

Physik V and possibly (but not necessary) Advanced Particle Physics

Date and Place:	Tue, 14:00 – 15:30, SR 2, Jungiusstr. 9 Fri, 12:00 – 13:30, SR 2, Jungiusstr. 9
Problem Classes:	Fri, 14:00 – 15:30, SR 2, Jungiusstr. 9
Starting on:	2 April 2019
