

Series of lectures by **Alexander Khodjamirian** (Uni.Siegen)
at Theory Division of YerPhi

Topic: "Quantum Chromodynamics and Hadrons"

Lecture 1: Mo, 14.05

Lecture 2: We, 16.05

Lecture 3: Fr, 18.05

Lecture 4: Mo, 21.05

Abstract:

Introduced the basic elements of quantum chromodynamics (QCD). The Lagrangian, effective coupling and symmetries of QCD were discussed. The main properties of hadrons, strongly interacting bound states of quarks, antiquarks and gluons, their observed spectrum and flavour content were overviewed. QCD-based methods used to calculate characteristics of hadrons were introduced. These lectures were oriented for master and PhD students specializing in theoretical particle physics and having a basic knowledge of quantum field theory.