



Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG

CHAMPP

CENTER IN HAMBURG
FOR ASTRO, MATHEMATICAL
AND PARTICLE PHYSICS

LECTURE COURSE IN THE CHAMPP GRADUATE SCHOOL

Winter Term 2018/2019

Quantum Mechanics II

G. Arutyunov

Course Description:

This course deals with some advanced aspects of quantum mechanics. It includes description of quantum mechanics in the Hilbert space formalism, Weyl quantization, the theory of angular momentum and spin, the treatment of charged particles in an electromagnetic field, systems of many particles, and quantum radiation. Special attention is paid to physically relevant approximation methods such as perturbation theory, the variational principle, the WKB approach and scattering theory.

Prerequisites:

Theoretical Physics II (Quantum Mechanics)

Literature:

Lecture notes by G. Arutyunov

S. Weinberg, Quantum mechanics, Cambridge University Press, 2013

Date and Place:

Tue, 8:30 – 10:00, Hörsaal III, Jungiusstraße 9

Fri, 8:30 – 10:00, Hörsaal III, Jungiusstraße 9

Problem Classes:

Tue, 10.15-11.45, SR 3, Jungiusstraße 9

Starting on: 23 October 2018

Starting on:

16 October 2018
