

CHAMPP

CENTER IN HAMBURG FOR ASTRO-, MATHEMATICAL AND PARTICLE PHYSICS

LECTURE COURSE IN THE QUANTUM UNIVERSE RESEARCH SCHOOL

Summer Term 2022

Advanced Algebra

P. Wedrich

Course Description:

This course covers a selection of algebraic concepts and techniques that are used in many areas of mathematics. The starting point is the theory of rings and modules, from which we will proceed to topics in representation theory and the basics of homological algebra.

Prerequisites:

Familiarity with basic notions from algebra (groups, rings) and a solid foundation in linear algebra. Previous (or parallel) exposure to category theory or representation theory (e.g. of Lie algebras) may be beneficial, but is not essential.

Date and Place: Tue, 10:15 – 11:45, H3, Geomatikum

Thu 10:15 – 11:45, H6, Geomatikum

Problem Classes: Tue, 12:15 – 13:45, Room 1240, Geomatikum

Starting on: 5 April, 2022