



Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG

CHAMPP

CENTER IN HAMBURG FOR
ASTRO-, MATHEMATICAL AND
PARTICLE PHYSICS

LECTURE COURSE IN THE QUANTUM UNIVERSE RESEARCH SCHOOL

Summer Term 2023

Introduction to String Theory

Volker Schomerus

Course Description:

The course covers the basic concepts of modern string theory. This includes covariant and light-cone quantisation of bosonic and fermionic strings, geometry and topology of string world-sheets, vertex operators and string scattering amplitudes, world-sheet and space-time supersymmetries, elements of conformal field theory, Green-Schwarz superstrings, strings in curved backgrounds, low-energy effective actions, D-brane physics.

Prerequisites:

Quantum Field Theory I/Quantum Mechanics II, Special Relativity

Date and Place:

Wed, 9:15–10:45, SR 2, Gebäude 2a, Bahrenfeld
Thu, 11:00–12:30, SR 2, Gebäude 2a, Bahrenfeld

Starting on:

5 April 2023
