

CHAMPP CENTER IN HAMBURG FOR ASTRO-, MATHEMATICAL AND PARTICLE PHYSICS

## LECTURE COURSE IN THE QUANTUM UNIVERSE RESEARCH SCHOOL

Summer Term 2024

# **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:

Mon, 9:15–10:45, SR 2, Building 2a, Bahrenfeld Fri, 9:15–10:45, SR 2, Building 2a, Bahrenfeld 5 April 2024

Starting on: