



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 2024

Physics of the Standard Model

Kerstin Tackmann

Course Description:

- Standard Model processes at lepton and hadron colliders
- electromagnetic interactions (QED)
- strong interactions (QCD)
- electroweak interactions
- electroweak symmetry breaking
- flavor physics
- Higgs physics
- neutrino physics (if time permits)

Prerequisites:

Basic knowledge of quantum field theory will be helpful but is not required.

Date and Place: Wed, 9:15–10:45, SR 2, Building 2a, Bahrenfeld
Thu, 9:00–09:45, SR 2, Building 2a, Bahrenfeld

Problem Classes: Thu, 10:00–10:45, SR 2, Building 2a, Bahrenfeld

Starting on: 3 April 2024
