



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

Experiments on Physics Beyond the Standard Model

Elisabetta Gallo and Peter Schleper

Course Description:

This lecture will provide an introduction of experimental aspects on physics beyond the Standard Model. The following topics will be covered:

- The shortcomings of the Standard Model
- Supersymmetry
- Grand Unified Theories
- Compositeness
- Dark matter
- Axions
- Exotic neutrinos
- CP violation
- Future colliders

Prerequisites:

Knowledge on particle physics on the level of a bachelor degree in physics is recommended, but not absolutely necessary.

Date and Place:

Tue 11:00–12:30, SR 4064, Bahrenfeld
Fri 10:15–11:00, SR 1076, Bahrenfeld

Problem Classes:

Fri 11:00–11:45, SR 1076, Bahrenfeld

Starting on:

4 April 2023
