



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

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Summer Term 2021

# Experiments on Physics Beyond the Standard Model

Krisztian Peters and Christian Schwanenberger

## 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, Fri 10:15–11:00, Zoom  
<https://desy.zoom.us/j/99027956468>  
Meeting ID: 990 2795 6468, Passcode: 976878

## Problem Classes:

Fri 11:00–11:45, Zoom

## Starting on:

6 April 2021

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