

CHAMPP

CENTER IN HAMBURG FOR ASTRO, MATHEMATICAL AND PARTICLE PHYSICS

LECTURE COURSE IN THE CHAMPP GRADUATE SCHOOL

Winter Term 2018/2019

Experiments on Physics beyond the Standard Model

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Course Description:

This lecture will provide an introduction of experimental aspects on physics beyond the Standard Model in collider and non-collider experiments. The following topics will be covered:

- The Standard Model and its limits
- Supersymmetry
- Compositeness and extra dimensions
- Resonant and non-resonant searches
- Dark matter
- Long lived particles
- Flavour anomalies
- Future experiments

Prerequisites:

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

Date and Place: Tue, 08:30 – 10:00, Hörsaal AP, Jungiusstrasse 11

Fri, 10:15 – 11:00, SR 6, Jungiusstrasse 9

Problem Classes: Fri, 11.00-11.45, SR 6, Jungiusstraße 9

Starting on: 26 October 2018

Starting on: 16 October 2018