

## LECTURE COURSE IN THE QUANTUM UNIVERSE RESEARCH SCHOOL

Summer Term 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. The following topics will be covered:

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

#### **Prerequisites:**

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

Tue, 10:15 – 11:45, SR 2, Jungiusstr. 9
Fri, 10:15 – 11:00, SR 4, Jungiusstr. 9
Fri, 11:00 – 11:45, SR 4, Jungiusstr. 9
2 April 2019