28.04.2017
[Summer School 2017: Particles, Strings and Cosmology]
[Module 2]
[Course 2a: Particle Physics]
[Course description]

<table>
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<th>Title</th>
<th>Particle Physics</th>
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| Lecturers      | Prof. Dr. Elisabetta Gallo (DESY and UHH)  
Dr. Sarah Heim (DESY)  
Dr. Andreas Hinzmann (UHH) |
| Course duration in academic hours | 20h |
| Credits (ECTS) | Up to 2 (in combination with courses 2b and 2c) |
| Notes          | Course duration may include tutorials |

Course description

The course will start with an introduction to experimental particle physics and principle of detection of particles. It will first cover tests at colliders of the strong and electroweak interactions and then describe measurements of the properties of the Higgs boson. Finally searches for new physics beyond the standard model will be reported, including dark matter candidates. Particular emphasis will be given to recent results at the LHC.

The course can be very well followed in combination with Quantum Field Theory (1c) and Cosmology (2c) and may contain tutorials.

Notice: The program is subject to change.