Course Description:
The exciting field of particle acceleration in plasmas has seen enormous progress over the last decade. It investigates the interaction of laser pulses of highest intensities and relativistic high current-density particle beams with plasmas for the generation of accelerating electric fields in excess of 10 GV/m. Such field strengths surpass those in metallic particle accelerators, which are for example used in the flagship machines at DESY, by many orders of magnitude. Thus, these novel plasma-based schemes may pave the way for a revolution in state-of-the-art accelerator technology.


Prerequisites:
There are no prerequisites. Basic knowledge in laser and accelerator physics is helpful.

Literature:
Will be discussed during the lecture.

Date and Place: Wed, 14:00 – 15:30, SR 3, Jungiusstraße 9
Problem Classes: Wed, 15:45 – 16:30, SR 3, Jungiusstraße 9
Starting on: 31 October 2018

Starting on: 17 October 2018