
Einladung zum
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The force of light

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Today's high intensity lasers reach intensities in excess of 10^{20} W/cm². At these intensities, electrons oscillate with almost the speed of light, and we enter the regime of relativistic optics. Due to the combined action of the electric and magnetic field of the intense electromagnetic wave electrons are accelerated to energies in excess of 100 MeV. The production of fast electrons also leads to the generation of intense ion beams. Recently it became possible to generate both intense monoenergetic ion and electron beams with lasers. The possible applications of these phenomena are numerous. Important are laser-induced nuclear reactions, the generation of medically relevant radio isotopes with lasers, as well as in the future the radiation treatment of cancer with laser-generated particle and photon beams.

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(ab 17:00 Uhr Kaffee)
Technische Universität Wien, Freihaus,
Hörsaal 6 (Turm A, grüner Bereich, 2. Stock)
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