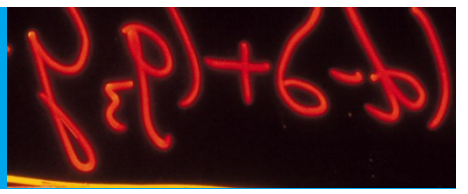
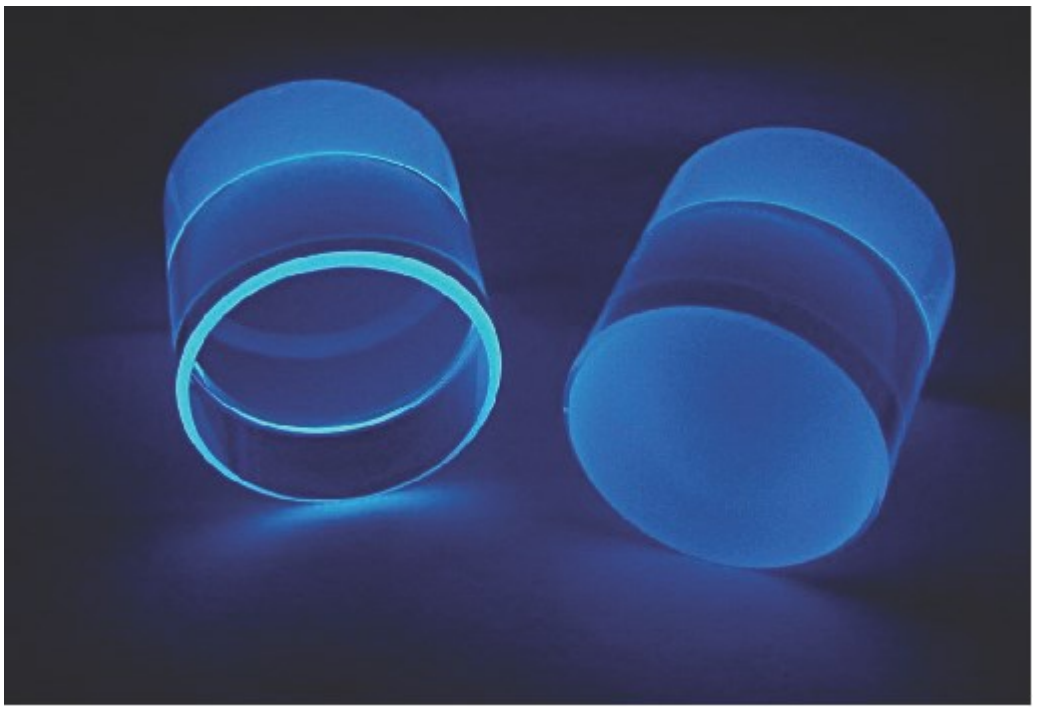
DESY
Physics Seminar



The Low Side of the Dark Side.

Jochen Schieck (HEPHY)

Tuesday, 2 May 2017, 16:45 h, DESY Auditorium



The quest for the particle nature of Dark Matter is one of the big open questions of modern physics. A well-motivated candidate for Dark Matter is the so-called WIMP - a weakly interactive massive particle. Recently several theoretically well-motivated models with Dark Matter candidates in a mass region below the WIMP mass-scale gained also a lot of interest, theoretically and experimentally. The CRESST II experiment located at the Gran Sasso laboratory in Italy is optimised for the detection of the elastic scattering of these low mass Dark Matter particles with nuclei. Besides the search for Dark Matter particles scattering with nuclei, we present a new search for so-called Dark Photons, also based on CRESST data. Finally the potential and the layout of a future silicon based dark matter experiment, dedicated to sub-GeV Dark Matter detection, is discussed.

- **Coffee, tea and cookies will be served at 16:30h**
- **After the seminar there is a chance for private discussions with the speaker over wine and pretzels**