

## **Seminar über Ultrafast Science and Technology**

**Referent:** Dr. Georg Achazi, Institute for Experimental Physics, Freie Universität Berlin, Berlin, Germany

**Titel:** Transmission of parametrically polarization shaped pulses through a hollow core photonic crystal fiber

In this talk a method for ultrafast polarization pulse shaping through a micro structured hollow core photonic crystal fiber is presented. The pulses are shaped in pulse sequences in which the energy, distance, phases, and chirps as well as the state of polarization of each individual sub-pulse can be independently controlled. The application of these pulses for coherent control is demonstrated for feedback loop optimization of the multi-photon ionization of potassium dimers and the possibility to reconstruct the pulse shape by reflecting the pulses back through the fiber is shown.

**Zeit:** Mittwoch, 03.12.2014, 16:15 Uhr

**Ort:** **Hörsaal B78**, Gebäude exakte Wissenschaften, Sidlerstrasse 5, Bern, Schweiz