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

**Referent:** Tobias Schweizer, Institute of Applied Physics, University of Bern

**Titel:** Ptychographic reconstruction of XFEL pulses

In recent years the transfer of common spatial Ptychography algorithms to the time domain has gained a lot of interest in the scientific community. Time-domain Ptychography (TDP) has already been used by various groups to characterise fs laser pulses. In this talk, the application of TDP to the characterisation of FEL X-ray pulses is discussed. We will take a closer look at how TDP works and how it is applied to angular streaking data acquired at the LCLS free electron laser. Some simulations are presented as proof of concept, as well as some preliminary results obtained from the actual data. Towards the end of the presentation current challenges will be highlighted and discussed.

**Zeit:** Donnerstag, 12.04.2018, 11:15 Uhr

**Ort:** **Hörsaal B116**, Gebäude exakte Wissenschaften, Sidlerstrasse 5, Bern, Schweiz