

# Opportunities from Ultrafast Single-Particle Single-Shot Imaging Experiments for Atmospheric Sciences

*Thursday 14 November 2024 13:50 (20 minutes)*

The intense X-ray pulses from free-electron laser sources (XFEL) allow imaging of single nanometer sized samples with single shots. In my talk I will briefly introduce XFELs and the single-shot imaging capabilities of free-flying particles at SwissFEL. I will then present a few showcase examples for studying the (static) morphology of nanoparticles and following light-induced processes on the nanoscale. I will finish with first applications of single-shot imaging to atmospherically relevant systems.

## Significance

**Presenter:** BOSTEDT, Christoph (PSI - Paul Scherrer Institut)

**Session Classification:** Ultrafast or time-resolved