

Einladung zu einem Kolloquium

Datum/Zeit: **Dienstag, 08.10.2024, 16.45 Uhr**

Referent: **Prof. Barbara Wyslouzil**
The Ohio State University, Columbus, USA

Titel: *Nanoparticle Studies in Supersonic Flow*

Ort: **HCI J3**

Supersonic flow offers a unique opportunity to follow the evolution of nanoparticles on the microsecond timescale. The initial appearance of the droplets/particles and their further development can involve a number of nucleation steps: homogeneous nucleation from the supersaturated vapor to the (supercooled) liquid, nucleation of a solid phase from the supercooled liquid, and even heterogeneous nucleation of other species onto pre-existing particles. Furthermore, under some conditions the structure of these droplets can also be inferred. This talk will summarize the key experiments that have been used to characterize the thermodynamic state of the flow as well as the evolving size, state and composition of the aerosol. The approaches used to determine nucleation rates, and the importance of experiments conducted in supersonic flows to advancing the field of nucleation are discussed.

Gäste sind willkommen