

## 19th January 2023 - 10:00 h

CFEL – Building 99, seminar room I+II (ground floor)

https://desy.zoom.us/j/65600698021, Meeting ID: 656 0069 8021, Passcode: 857289

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## Laboratory Surface Science Studies in Astrochemistry -Always Measure Don't Trust Your Intuition!

The astrophysical gas-grain interaction dominates cold, dense environments in space. Laboratory surface science provides a tool with which to probe that interaction and a simple combination of infrared spectroscopy and mass spectrometry can reveal much about the physics and chemistry of molecular interactions of relevant species such as water, carbon monoxide and others with model grain surfaces. Indeed, it allows us to demonstrate how the microscopic can influence the macroscopic. In developing such studies we often rely on our intuition to give us a handle on what is going on. In this presentation, I will, through experimental measurements, illustrate how it is better to actually make measurements than rely on intuition and expectation based on interpretation of the literature.

Host: Melanie Schnell / CFEL Molecular and Ultrafast Science Seminar