



## NIC Seminar

### *Topic „Computational Science and Methods“*

**Topic:** **The impact of surfactant on ice nucleation near the air-water interface**

**Speaker:** Caroline M. Taylor,  
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**Contents:** The formation of ice crystals in tropospheric clouds is influenced by the presence of pollutants and other aerosols and has a direct impact on cloud properties and precipitation. This process, occurring in water droplets through both homogeneous and heterogeneous ice nucleation, is of course highly sensitive to the nature of the underlying nucleation site. We are using a combination of molecular simulations and mean-field approaches in conjunction with experiment to explore the impact of long-chain alcohols – formed by the reaction of biomass processing products in the upper atmosphere – as nucleators in order to better understand the mechanism by which a nucleator stabilizes the formation of ice near the air-water interface.

**Time:** Tuesday, 13 January 2009, 14:00

**Venue:** Besprechungsraum 1, Jülich Supercomputing Centre

Anyone interested is cordially invited to participate.

sgd Dr. Sabine Höfler-Thierfeldt