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**S E M I N A R**  
on  
**Semiconductor Physics and Nanotechnology**

**Mo, 01.06.2026, 11:15 Uhr,**

**Seminar in  
person in the physics lecture hall or via Zoom**

**“Liquid at Interfaces and in Confinement -  
Structure and Relaxation Dynamics studied by X-Ray Scattering”**

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Ionic liquids (ILs) composed of cations with long aliphatic side chains can exhibit mesoscopic order and liquid crystalline mesophases. The solvate affinity to the ionic- and aliphatic domains of such ILs can strongly affect their interfacial structures. We employ X-ray scattering techniques to investigate these structures on the molecular length scale in bulk, near surface and in nm-confinement. Synchrotron experiments were performed at ESRF and PETRAIII. I will present results from neat ILs and IL/solvent mixtures. At the surface, we observe the formation of adsorbate layers and surface induced smectic order. In confinement we follow the adsorption/desorption dynamics and structural relaxation processes.

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**Zoom – Link:**

<https://zoom.us/j/96375934537?pwd=RTIKTWhSdzRHU211YTY1bGFxTUtpZz09>

[Meeting-ID: 963 7593 4537](#)

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