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ZBP Colloquium, Thursday, November 6, 2025

Combining X-Ray Scattering and Molecular Simulations for the Study of Lipid and Surfactant Layers at Air/Water Interfaces

Lipids and surfactants are important building blocks of biological and technological soft matter, respectively. Understanding their structure and (thermo-)dynamics therefore holds much promise for future applications. Recent progress in experimental characterization methods and simulations has been facilitating combined experimental/theoretical investigations. Here, we integrate surface-sensitive x-ray scattering techniques with atomistic molecular dynamics simulations for the comprehensive characterization and description of lipid and surfactant layers at air/water interfaces. This approach serves for the interpretation of experimental results and for the validation and optimization of simulation force fields.

<https://tinyurl.com/zbp-schneck20251106>

Talk: 14:15

Tea/Coffee at 14:00

Campus Saarbrücken

Building C6.4

Room 0.09 (Lecture Hall II)

Schedule with
full abstract



Teams link

