

Soft Matter Surfaces Investigated with XPCS

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X-ray photon correlation spectroscopy (XPCS) in grazing incidence geometry allows the investigation of surface dynamics on small length scales. I will give examples ranging from the first proof of principle experiments of bulk liquid surface dynamics to recent experiments studying the freezing in of surface dynamics at the glass transition. Dynamic and static properties of metal-polymer composite systems and thin wetting films will be discussed. Perspectives and limitations of surface XPCS in terms of time and length scales with regards to the current CCD-technique available at ESRF and APS will be addressed.