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## Foams in the view of SANS

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Foams are a complex material with a rich structural hierarchy. Aqueous foams in particular change their structure over time due to processes like gravitational drainage, Ostwald ripening and coalescence. Because of this complex structure, modelling SANS curves obtained from foams is challenging. Here, we employ a recently developed model, describing SANS data of foams. The model takes into account the geometry of the foam bubbles and is based on an incoherent superposition of reflectivity curves, arising from the foam films, and a small-angle scattering (SAS) contribution from the Plateau borders. We present results obtained from foams stabilized by (i) a standard cationic surfactant ( $C_{14}$ -TAB), (ii) temperature responsive pNIPAM-microgels and (iii) protein (-lactoglobulin, casein, bovine serum albumin and lupine) stabilised foams i.e. drainage states, that provides information about the thickness. The numerous examples underline the models generality and thus gives valuable new insight of the foam aging process.

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**Sitzung Einordnung:** Mounting Posters, Beer and light Dinner

**Track Klassifizierung:** Soft Matter