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**Surface Dynamics in thin films of a small organic glass-former**  
STEPHEN SWALLEN, MARIE MAPES, KENNETH KEARNS, MARK EDIGER, University of Wisconsin - Madison, SUSHIL SATIJA, NIST — Enhanced dynamics of molecules near the free surface of thin supported films have been measured using neutron reflectivity. Thin films of the small molecule glass former tris-naphthylbenzene were vapor deposited with subnanometer initial surface roughness, allowing diffusion rates to be measured between isotopically labeled layers. Measured dynamics suggest a mobile surface layer of about 4 nm with a significant decrease in Tg. This can be compared with recent measurements in polymeric systems which find thick active layers and Tg shifts up to 30 K.

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