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**Two particle microrheology of quasi-2D viscous systems in the limit of shallow bulk layer** THIBAUT DIVOUX, Ecole Normale Supérieure de Lyon, 46 allée d'Italie, 69007 Lyon, France, KENNETH DESMOND, JAMES SEBEL, ERIC WEEKS, Department of Physics, Emory University, Atlanta, Georgia 30322, USA — Human serum albumin (HSA) protein molecules at an air-water interface is a model system for which it is difficult to decouple the properties of the 2D interfacial film from those of the 3D fluid. Here we focus on the influence of the bulk confinement (i.e. the thickness of the layer of water) on the dynamics of HSA at an air-water interface. To do so, we have developed a setup which allows us to control the depth of the water layer over which HSA protein molecules are dispersed. In particular, we investigate the limit of shallow layers, for which we report measurements of the spatially correlated motion of colloidal particles embedded at the interface, for different surface viscosities. We describe the influence of the bulk finite size on the behaviour of the spatial correlation functions of the particle motion, and extend the description of the correlation functions in terms of a master curve first obtained for large bulk volumes, to the limit of shallow layers.

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