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Viscous rheology of soft particles near jamming ERIK WOLDHUIS, Leiden University, BRIAN TIGHE, Delft University, MARTIN VAN HECKE, Leiden University — We investigate the effect of changing the exact nature of the viscous interaction in simulations of sheared soft, viscous, repulsive disks, which are considered to be a good model for foams and emulsions. We determine the way in which the power-law exponent of the rheological curve, in other words the shear-thinning or shear-thickening part, depends on the microscopic viscous interaction around the jamming density. We attempt to find a model that describes and predicts this dependence.

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