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**Micro-rheology of soft glassy materials: Collective phenomena in concentrated emulsions** NORA BENNANI, LOF, unité mixte Rhodia-CNRS-Bordeaux 1, 178 avenue du Docteur Schweitzer, F-33608 Pessac cedex - France, ANNIE COLIN, LOF — In previous studies, non local effects have been evidenced and modeled [1, 2]. The fluidity is the number of rearrangement of droplets by unit of time, and appears to be a critical parameter to describe experimental data. In the present work, flows of flocculated and non-flocculated concentrated emulsions within Hele-Shaw cells are investigated. Fast confocal imaging is used to determine fluidity and cooperative length, and the Kinetic Elasto-Plastic model is challenged for systems with different interdroplet attractions

[1] J. Goyon, A. Colin, G. Olvarlez, A. Ajdari, and L. Bocquet, Nature 454 (2008) 84-87.
[2] L. Bocquet, A. Colin, and A. Ajdari, PRL 103 (2009).

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