

Abstract Submitted
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Self-

assembly of colloids under periodically-reversed sedimentation.¹ COLINE BRETZ, Solvay, CNRS, University of Pennsylvania, JEAN BAUDRY, ESPCI, DENIS BARTOLO, ENS Lyon, ARJUN YODH, University of Pennsylvania, REMI DREYFUS, Solvay, CNRS, University of Pennsylvania — Hyperuniform materials have attracted increasing interest over the past decade due to their potential exciting photonic properties. Motivated by the exploration of novel ways of assembling hyperuniform materials, we are performing an echo protocol on micrometer-sized colloidal particles under sedimentation in a Hele-Shaw cell. Using a combination of static light scattering, differential dynamics microscopy and direct imaging, we will show how we can follow the structural and dynamical changes of these systems and characterize their hyperuniformity.

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