

Abstract Submitted
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Critical Phenomena in Periodically-Sheared Suspensions EM-MANOUELA FILIPPIDI, Center for Soft Matter Research, New York University, LAURENCE RAMOS, Universite Montpellier II / CNRS, PAUL CHAIKIN, DAVID PINE, Center for Soft Matter Research, New York University — Suspensions of non-colloidal particles under slow periodic strain undergo a dynamical phase transition from an absorbing to an active fluctuating state at a critical strain amplitude. We measure the relevant diverging length and time scales in the experiment and in an activated random walker model. Their scaling near criticality suggests that the model belongs to the conserved directed percolation class.

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