Abstract Submitted
for the DFD11 Meeting of
The American Physical Society

**Out-of-Equilibrium effects in suspensions of light-activated artificial microwimmers** JEREMIE PALACCI, STEFANO SACANNA, DAVID PINE, PAUL CHAIKIN, CSMR, NYU, CSMR, NYU TEAM — We present a new type of colloidal artificial swimmers propelled by the decomposition of hydrogen peroxide and activated by light. The effect is reversible and allows external control of the swimming/non swimming behavior of the particles. Moreover the bulk synthesis makes possible the study of very concentrated assemblies of monodisperse and identical microswimmers. These active agents are used to explore fancy effects of out-of-equilibrium systems, e.g. clustering, "tugboat" effect...

Jeremie Palacci
CSMR, NYU

Date submitted: 11 Aug 2011 Electronic form version 1.4