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Nonequilibrium Phase Transitions in Supercooled Water DAVID LIMMER, DAVID CHANDLER, University of California, Berkeley — We present results of a simulation study of water driven out of equilibrium. Using transition path sampling, we can probe stationary path distributions parameterize by order parameters that are extensive in space and time. We find that by coupling external fields to these parameters, we can drive water through a first order dynamical phase transition into amorphous ice. By varying the initial equilibrium distributions we can probe pathways for the creation of amorphous ices of low and high densities.

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