Memory loss in a particle swelling model[1] NATASHA PROCTOR,
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particles that are sheared back and forth repetitively will self-organize and "adapt"
to that shearing so long as its amplitude is below some critical value. This organi-
zation creates a memory in the system that can later be "read out" by observing
how many particles are perturbed by a given shear. We use a model that allows us
to efficiently study this behavior. In place of shear, particles swell to a given ampli-
tude, and overlapping particles are repelled. This process repeats while the system
is monitored. By training the system on progressively larger memories, the system
"forgets" memories at smaller amplitudes. We present a study of this "forgetting"
as the system approaches the critical swelling amplitude.

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