

Abstract Submitted
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Aging near the wall in colloidal glasses CONG CAO, XINRU HUANG, ERIC WEEKS, emory university — In a colloidal glass system, particles move slower as sample ages. In addition, their motions may be affected by their local structure, and this structure will be different near a wall. We examine how the aging process near a wall differs from that in the bulk of the sample. In particular, we use a confocal microscope to observe 3D motion in a bidisperse colloidal glass sample. We find that flat walls induce the particles to organize into layers. The aging process behaves differently near the boundary, especially within the first three layers. Particle motion near the wall is noticeably slower but also changes less dramatically with age. We compare and contrast aging seen in samples with flat and rough walls.

Cong Cao
emory university

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