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Soft Spots in Aging Colloidal Glasses MOYOSORE ODUNSI, Emory University, CRAIG MALONEY, Carnegie Mellon University, ERIC WEEKS, Emory University — We track the movement of particles in colloidal glasses using confocal microscopy. Colloidal glasses are out of equilibrium and so they age: the motion of the particles slows down over time. The aging is initiated by stirring the sample. In our aging samples, we examine the motion of the particles on small time scales to infer positions of soft spots (localized regions of low-frequency vibrational modes). We then look at correlations between these soft spots and subsequent particle rearrangements on larger time scales.

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