Dynamical Heterogeneity in a Granular System Near the Jamming Transition KARINA E. AVILA, Ohio University, USA, ANNETTE ZIPPELIUS, Georg-August-Universitaet Goettingen, Germany, HORACIO E. CASTILLO, Ohio University, USA — We investigate dynamical heterogeneity in event driven simulations of a two-dimensional bidisperse granular fluid. We study the dynamic susceptibility $\chi_4(t)$ extracted from two different correlation functions $Q(t)$ and estimate the dynamic correlation length $\xi(t)$ obtained from the four-point structure factor $S_4(q, \tau_4)$, where τ_4 is the time corresponding to the maximum of $\chi_4(t)$. We find that the dynamic correlation length grows as the volume fraction is increased to approach the jamming transition.

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