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Absence of structural glass transition in a monoatomic model liquid predicted to undergo an ideal glass transition MATTHIAS TROYER, CHARLOTTE GILS, HELMUT KATZGRABER, ETH Zurich — We study numerically a monodisperse model of interacting classical particles predicted to exhibit a static liquid-glass transition. Using a dynamical Monte Carlo method we show that the model does not freeze into a glassy phase at low temperatures. Instead, depending on the choice of the hard-core radius for the particles, the system either collapses trivially or a polycrystalline hexagonal structure emerges.

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