4th Workshop on Statistical Physics



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Exploring the glassy dynamics of the Gaussian core model

jueves, 5 de octubre de 2023 9:00 (20 minutos)

We study the supercooled dynamics of the Gaussian Core Model in the low- and intermediate-density regimes by means of molecular dynamics simulations. In particular, we discuss the transition from the low-density hard-sphere-like glassy dynamics to the high-density one. The caging mechanism describes the dynamics at low densities well, giving rise to intermittent dynamics. At high densities, the particles undergo a more continuous motion in which the cage concept loses meaning. We elaborate on the idea that these different supercooled dynamics are in fact the precursors of two different glass states.

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