

Relaxation and Transport in Glass-Forming Liquids

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Abstract

Experimentally it is found that the relaxation dynamics (or the viscosity) of supercooled liquids slows down (increases) by 13-15 decades if the temperature is lowered by a factor of only 2-3. The microscopic reason for this dramatic slowing down of the dynamics is so far not really understood. In this talk I will present the results of molecular dynamics computer simulations in which we have investigated the processes that are relevant for the slow transport of the particles in these systems and show that these processes are highly cooperative.

Ref.: G. A. Appignanesi, J. A. Rodriguez Fris, R. A. Montani, and W. Kob Phys. Rev. Lett. 96, 057801 (2006)