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Is a "homogeneous" description of dynamic heterogeneities possible? GRZEGORZ SZAMEL, Dept. of Chemistry, Colorado State University — We study the simplest model of dynamic heterogeneities in glass forming liquids: the one-spin facilitated kinetic Ising model introduced by Fredrickson and Andersen [G.H. Fredrickson and H.C. Andersen, Phys. Rev. Lett. **53**, 1244 (1984); J. Chem. Phys. **83**,5822 (1985)]. We previously showed that the low-temperature, long-time behavior of the excitation density autocorrelation function predicted by a scaling approach can be obtained from a self-consistent mode-coupling-like approximation. Here we use a similar approach to investigate diffusion of a test particle and the incoherent intermediate scattering function.

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