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**Solution of the dynamics of high-dimensional liquids**

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The dynamics of a liquid composed of particles with spherically symmetric potentials has been solved exactly in limit of high dimensions  $d$ . The calculation is long but straightforward. At high density, an ergodicity-breaking glass transition is found. This computation allows one to assess the validity of approximation schemes such as Mode-Coupling Theory. As a by-product, because our calculation is, if not rigorous, elementary, an improvement in the bound for sphere packings in large dimensions is now at hand.

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