

Massachusetts Institute of Technology
Department of Physics

Condensed Matter Theory Seminar

“Glassy dynamics as a quantum effect”

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Abstract: We review the underpinning of the microcanonical ensemble and the more refined (and explicitly quantum) "Eigenstate Thermalization Hypothesis". We then find and apply a simple corollary of these to analyze the evolution of a liquid upon supercooling to form a structural glass. Simple theoretical considerations lead to a prediction for the viscosity of all supercooled liquids that seems to be empirically satisfied.

3:00pm
Monday, November 2, 2015
Duboc Seminar Room (4-331)