

Séminaire de physique statistique

Lundi 03/02/2020, 14:00-15:00

Orme des Merisiers Salle Claude Itzykson, Bât. 774

Some insights on structural glasses from mean-field theory

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The first two parts of this talk will review my recent results in mean-field structural glasses. These are amorphous solids which show intriguing experimental features. A first example will concern the wealth of phenomena that appear in the out-of-equilibrium dynamics (through e.g. a quench or an external drive). A second relates to even lower temperatures, where quantum effects start to play a role: thermodynamic quantities display an anomalous behaviour with respect to what one expects from standard (ordered) solids. The last part of the talk will be devoted to some perspectives and potential projects, either following up on some of these recent works around the glass transition or building upon my current interest in driven-dissipative many-body quantum dynamics and possible applications in low-temperature glasses.
