

## Cargèse 2023: Quantum localization and Glassy physics

### Some references on the out of equilibrium dynamics of glassy systems:

L. F. Cugliandolo,

<http://www.lpthe.jussieu.fr/~leticia/TEACHING/cours-martine-2016.pdf>

(basic on stochastic dynamics, coarsening, path integral representation of the generating functional)

A. J. Bray, *Theory of phase ordering kinetics*, Adv. Phys. 43, 357 (1994).

S. Puri, *Kinetics of Phase Transitions* in Kinetics of phase transitions, S. Puri and V. Wadhawan eds. (Taylor and Francis Group, 2009).

L. F. Cugliandolo, *Dynamics of glassy systems* in Les Houches, 2002, arXiv:cond-mat/0210312

(details on the out of equilibrium dynamics of mean-field models, like the  $p$ -spin spherical ones, also the Schwinger-Keldysh formalism to treat quantum problems, and details on the coupling to the bath and how to derive the kernels).

L. F. Cugliandolo, *The effective temperature*, J. Phys. A: Math. and Theor. 44 (48), 483001 (2011)

(the effective temperature interpretation of the deviations from equilibrium FDT which I did not have time to discuss in the lectures)

D. Barbier, L. F. Cugliandolo, G. S. Lozano, and N. Nesi, *Generalised Gibbs Ensemble for spherically constrained harmonic models*, SciPost Physics 13, 048 (2022)

L. F. Cugliandolo, G. S. Lozano, N. Nesi, M. Picco, and A. Tartaglia, *Quenched dynamics of classical isolated systems: the spherical spin model with two-body random interactions or the Neumann integrable model*, J. Stat. Mech. P063206 (2018)

L. F. Cugliandolo, *Recent Applications of Dynamical Mean-Field Methods*, arXiv:2305.01229, to appear in Annual Reviews of Condensed Matter

L. F. Cugliandolo and M. Müller, *Quantum Glasses – a review*, arXiv:2208.05417, to appear in "Spin Glass Theory and Far Beyond - Replica Symmetry Breaking after 40 years" (emphasis put on the equilibrium behavior of quantum models and, especially, the replica treatment of them)