## SEMPARIS – Séminaires en région parisienne

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## Forum de Physique Statistique @ ENS

Mercredi 8 Janvier 2025, 12:45 LPENS, 3 rue dUlm, College de France

Domaines : cond-mat.stat-mech

Titre: Slow thermalization in quantum many-body dynamics

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Résumé: In recent years, there has been considerable interest in the investigation of the approach to thermal equilibrium in isolated quantum many-body systems. When thermalization occurs, expectation values of local observables reach stationary values that depend only on few properties of the initial state and can be predicted with usual statistical mechanics ensembles. However, as I will demonstrate in this presentation, there exist scenarios where the time required for a system to thermalize can be extremely long. I will elucidate three distinct underlying mechanisms leading to anomalously slow thermalization in quantum systems.