

# Laboratoire de Physique Théorique et Hautes Energies

Unité Mixte de Recherche (UMR 7589) de Sorbonne Université et du CNRS

## SEMINAIRE du LPTHE

*Lundi 5 Décembre 2022, 15:00*

### Marco Schirò

*IPhT and Collège de France*

### Unravelling Quantum Many Body Dynamics

*Quantum statistical mechanics and condensed matter physics traditionally deal with the collective behaviour of systems in thermal equilibrium. Here remarkable phenomena are known to emerge at low energy, as a result of strong interactions and quantum statistics. Whether genuine quantum effects can survive far away from thermal equilibrium is a question which has recently attracted broad interest and found several theoretical and experimental motivations. In this talk I will review the recent progress in understanding the dynamics of strongly interacting quantum systems far from equilibrium. Along the way I will discuss the paradox of quantum thermalisation and its breakdown due to quenched disorder or quantum measurements.*

**Bibliothèque du LPTHE, tour 13/14, 4<sup>ème</sup> étage**

*N.B. La liste de tous les séminaires en région parisienne est disponible sur  
<http://semparis.lpthe.jussieu.fr>*