

## MP 7: HV 3: Stochastic Quantum Mechanics

Time: Tuesday 17:00–17:40

Location: H7

**Invited Talk**

MP 7.1 Tue 17:00 H7

**Stochastic Dynamics in Quantum Mechanics** — •DENIS BERNARD — Laboratoire de Physique de l'Ecole Normale Supérieure, CNRS, ENS & Université PSL, 75005 Paris, France.

Stochastic processes enter Quantum Mechanics from different corners: as results of quantum measurements and their effects on quantum systems, as noise providing stochastic models for environments in-

teracting with quantum systems, or as models for typical quantum states and operations. I shall review aspects of these strongly interconnected topics, hopefully covering discussions of statistical aspects of non-demolition measurements, quantum state monitoring, and the emergence of quantum jumps and spikes, and of statistical fluctuations of quantum coherences in many-body quantum model systems at, or away from, equilibrium.