

**MP 2: HV Bernard: Stochastic Dynamics in Quantum Mechanics**

Time: Monday 16:30–17:10

Location: H-HS VII

**Invited Talk**

MP 2.1 Mon 16:30 H-HS VII

**Stochastic Dynamics in Quantum Mechanics** — •DENIS BERNARD — CNRS & LPENS, Ecole Normale Supérieure de Paris

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 monitorings, and the emergence of quantum jumps and spikes, and of statistical fluctuations of quantum states and quantum coherences in many-body model systems at, or away from, equilibrium.