

School on Driven Quantum Systems

Nov 21-Nov 26, 2016

	Sunday 20	Monday 21	Tuesday 22	Wednesday 23	Thursday 24	Friday 25	Saturday 26
8:45-9:00		Opening					
9:00-10:15		Kohler	Kohler	Kohler	Zoller	Zoller	Petta
10:15-10:45		Coffee break					
10:45-12:00		Moore	Moore	Moore	Petta	Oliver	Oliver
12:00-14:00		Lunch					
14:00-15:15		Schmidt-Kaler	Schmidt-Kaler	Schmidt-Kaler	Rudner	Oliver	
15:15-15:45		Coffee break					
15:45-17:00			Rudner	Rudner	Zoller	Petta	
	17:00-19:00 Registration 19:30 Welcome reception			17:30-18:30 Discussion with lecturers (problem sets/lecture questions)		17:30-18:30 Discussion with lecturers (problem sets/lecture questions)	
20:30		Dinner	Dinner	Dinner	School Dinner	Dinner	Dinner

Lecturers:

S. Kohler (Instituto de Ciencia de Materiales de Madrid): *Floquet Theory for driven dissipative systems*

- [Lecture 1](#): Driven systems and Floquet theory
- [Lecture 2](#): Floquet theory in presence of quantum dissipation
- [Lecture 3](#): to be confirmed

J. Moore (Univ. of California, USA): *Topological Insulators and Floquet Tis*

- [Lecture 1](#): Introduction to topological insulators
- [Lecture 2](#): Non-equilibrium transport in correlated metals
- [Lecture 3](#): Non-equilibrium physics of topological phases

P. Zoller (Univ. of Innsbruck, Austria): *Quantum Optics of Many-Body Systems*

- [Lecture 1](#): Introduction
- [Lecture 2](#): Driven-dissipative quantum many body/quantum optics
- [Lecture 3](#): to be confirmed

F. Schmidt-Kaler (Univ. Mainz, Germany): *Experiments with cold ion crystals*

- [Lecture 1](#): Introduction: trapping, cooling and coherent manipulation
- [Lecture 2](#): Non-equilibrium dynamics with trapped ion crystals
- [Lecture 3](#): Fluctuation theorems, single ion heat engine

M. Rudner (Niels Bohr Institute, Denmark): *Floquet topological insulators*

- [Lecture 1](#): Introduction to Floquet topological insulators
- [Lecture 2](#): Many-body Floquet steady states I: pumping and interactions
- [Lecture 3](#): Many-body Floquet steady states II: open systems and bath engineering

J. Petta (Princeton Univ., USA): *Spin dynamics in quantum dots and quantum wires*

- [Lecture 1](#): Introduction to spin qubits and Landau-Zener interferometry
- [Lecture 2](#): Spin-orbit qubits
- [Lecture 3](#): Circuit quantum electrodynamics with a spin qubit/Artificial atom lasing

W. Oliver (MIT, USA): *Superconducting Qubits*

- [Lecture 1](#): Introduction to superconducting qubits
- [Lecture 2](#): Landau-Zener-Stückelberg physics
- [Lecture 3](#): noise spectroscopy and the C-shunt flux qubit