





Institut für Angewandte Physik Physikalisches Institut RHEINISCHE FRIEDRICH-WILHELMS-UNI-VERSITÄT BONN

COLLOQUIUM "OPTICS AND CONDENSED MATTER"

Florian Mintert

Imperial College London, London, UK

Control of coherence in time-dependent quantum systems

The dynamics of most quantum systems can be analysed and controlled in terms of time-dependent modulations of system Hamiltonian. In fields including optimal control and quantum simulation, such modulations are exploited routinely to modify system properties.

I will exemplify the use of periodic driving for control and analysis of quantum dynamics with periodic driving.

While aperiodic driving can potentially enrich our control over quantum systems, Floquet's theorem has resulted in a strong focus on periodic time-dependencies.

I will discuss how aperiodically driven quantum systems can help us to devise quantum simulators of time-dependent Hamiltonians.

June 6th, 16:45 h meet and greet with coffee, 17:15 h, talk live IAP lecture hall or via Zoom https://uni-bonn.zoom.us/j/98441612025?pwd=a01SSjlkY1Q3SDFhL09JQk1qc1V6dz09 Meeting-ID: 984 4161 2025 Kenncode: 294164