



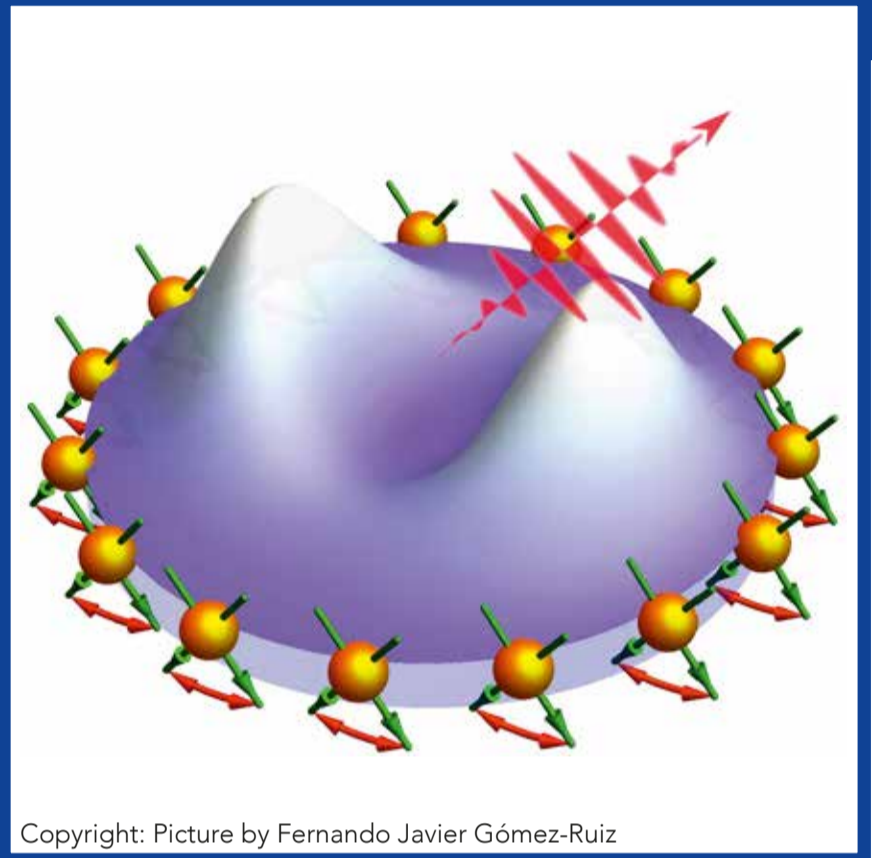
# Engineering Nonequilibrium Dynamics of Open Quantum Systems

## International Workshop 17 - 21 June 2019

This workshop aims to consolidate and unify the emerging body of work in two areas:

(i) nonequilibrium quantum dynamics of noisy and open systems, and (ii) driving quantum systems with tailored time-dependent protocols.

The themes of the event include the speed limits of nonunitary dynamics, quantum simulations with engineered protocols and platforms, optimal control, and quantum sensing and metrology.



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### Topics:

- Open quantum systems
- Quantum speed limits
- Nonequilibrium universality
- Quantum optimal control
- Kibble-Zurek scaling
- Shortcuts to adiabaticity
- Quantum sensing
- Dissipation
- Decoherence
- Quantum simulations
- Quantum annealing

### Invited speakers:

Sahar Alipour (FI)  
Howard Carmichael (NZ)  
Aurelia Chenu (US)  
Ines de Vega (DE)  
Inigo Egusquiza (ES)  
Rosario Fazio (IT)  
Juan José García-Ripoll (ES)  
Susana Huelga (DE)  
Fedor Jelezko (DE)  
Igor Lesanovsky (UK)  
Seth Lloyd (US)  
Eric Lutz (DE)  
Miguel-Angel Martin-Delgado (ES)  
Simone Montangero (IT)  
Anatoli Polkovnikov (US)  
Tomasz Prosen (SI)  
Pierre Rouchon (FR)  
Guiseppe Santoro (IT)

Enrique Solano (ES)  
Masahito Ueda (JP)  
Lorenza Viola (US)  
James Wootton (CH)  
Paolo Zanardi (US)

### Scientific coordinators:

Adolfo del Campo,  
Donostia-San  
Sebastián (ES)

Martin Plenio,  
Ulm (DE)

Armin Rahmani,  
Bellingham (US)

### Organisation:

Maria Voigt  
MPIPKS Dresden

Applications received before 28 February 2019 are considered preferentially.

Applications are welcome and should be made by using the application form on the event's web page. The number of attendees is limited. The registration fee for the international workshop is 140 Euro and should be paid by all participants. Costs for accommodation and meals will be covered by the Max Planck Institute. Limited funding is available to partially cover travel expenses.

### For further information please contact:

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