



Quantum Interactive Dynamics

International Workshop 12 - 15 March 2024

The natural evolution implemented by Noisy Intermediate-Scale Quantum (NISQ) devices is a quantum interactive dynamics generated by a combination of unitary gates and measurements. These platforms provide an opportunity to explore vastly larger parts of the Hilbert space and go beyond what can be realized in purely unitary systems. The aim of this workshop is to have focussed discussions about the recent theoretical and experimental developments in this context.

Topics

- Noisy Intermediate-Scale Quantum (NISQ) devices
- Measurement based transitions
- Open quantum systems
- Error correction
- Computational complexity
- Classical shadows



Invited speakers

Ehud Altman (US)
 Hannes Bernien (US)
 Vir Buchlandani (US)
 Henrik Dreyer (DE)
 Katja Klobas (UK)
 Barbara Kraus (DE)
 Xiao Mi (US)
 Tibor Rakovszky (US)
 Federica Surace (US)
 Ruben Verresen (US)
 Sagar Vijay (US)
 Hongzheng Zhao (CN)
 Tianci Zhou (US)

Scientific coordinators

Roderich Moessner
 MPIPKS, DE
 Frank Pollmann
 TUM, DE
 Adam Smith
 University of Nottingham, UK
 Shivaji Sondhi
 University of Oxford, UK

Organisation

Mandy Lochar
 MPIPKS Dresden

We plan an on-site workshop. Talks and posters will exclusively be presented on-site.

The number of attendees is limited. The **registration fee** for the international workshop is 200 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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