

Workshop
High-Dimensional Quantum Dynamics
Challenges and Applications

University of Hamburg

July 16-19, 2024

HDQD brings together scientists from physics and chemistry that are interested in the developments and applications of quantum dynamical methods and algorithms to explore topical research problems. The aim is to discuss the state-of-the-art and future challenges of the fields.

Topics cover a broad range including, among others, chemical reaction dynamics and control, ultrafast processes, surface scattering, vibrational versus electron dynamics, non-adiabatic interactions, molecular spectroscopy and the non-equilibrium quantum dynamics of trapped ultracold atoms and mixtures thereof.

The program consists of invited and contributed talks as well as posters.

Participants can apply for either oral or poster contributions.

We strongly encourage the participation of PhD students to promote scientific discussion, exchange and collaboration.

There is a conference fee which includes all conference events and the conference dinner.

Registration deadline: May 15, 2024

Abstract submission deadline: May 15, 2024

Early registration and in particular early reservation of accommodation is highly recommended.

Invited Speakers:

O. Alon (Haifa)

T. Carrington (Queen's)

F. Gatti (Paris-Saclay)

H. Larsson (Merced)

E. Matyus (Eötvös Lorand)

E. Narevicius (Dortmund)

H. Sadeghpour (ITAMP)

C. Sanz (Madrid)

H. Wang (Denver)

I. Burghardt (Frankfurt)

O. Christiansen (Aarhus)

S. Gomez (Salamanca)

D. Lauvergnat (Paris-Saclay)

S. Mistakidis (Missouri)

D. Picconi (Groningen)

F. Santoro (CNR)

M. Thoss (Freiburg)

G. Worth (London)

L. Cao (Huazhong)

M. Erakovic (ETH)

J. Küpper (DESY)

U. Manthe (Bielefeld)

R. Mukherjee (Hamburg)

P. Saalfrank (Potsdam)

R. Santra (DESY)

O. Vendrell (Heidelberg)