

Hybrid workshop

## Reduced Density-Matrix Functional Theory: Improving its Foundation and Extending its Scope

**Trento (Italy), October 3-14, 2022**

The aim of this international workshop is to discuss and explore new aspects and challenges in Reduced Density Matrix Functional Theory (RDMFT).

This in-person workshop will be complemented by five mini-symposia (hybrid format), open to a broad international audience:

### Symposia

Symposium 1 - October 3, 14:30-18:00 CEST

*Exact results in RDMFT: properties of universal functionals, role of N-representability, etc.*

Symposium 2 - October 5, 9:30-13:00 CEST

*RDMFT & quantum chemistry: Computational and theoretical state-of-the-art, open challenges*

Symposium 3 - October 7, 9:30-13:00 CEST

*Extending the scope of RDMFT: ultracold gases, superconductors, relativistic Quantum Mechanics, etc.*

Symposium 4 - October 10, 9:30-13:00 CEST

*RDMFT for excited states and time-evolution*

Symposium 5 - October 12, 9:30-13:00 CEST

*RDMFT for translational invariant systems*

### Organizers

Carlos **Benavides-Riveros** (Max Planck Institute for the Physics of Complex Systems, Dresden)

Eberhard **Gross** (The Hebrew University of Jerusalem)

Christian **Schilling** (Ludwig-Maximilians-Universität München)

### Director of the ECT\*: Professor Gert Aarts

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