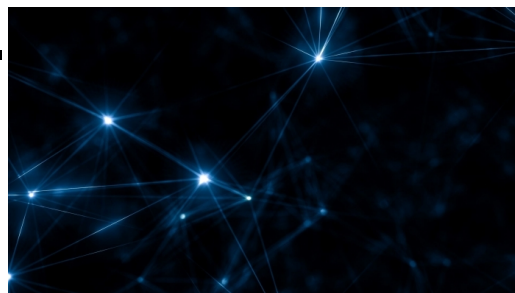




# Workshop on Long-Range interactions in Quantum Systems



**05.Sep - 08.Sep 2023**

**Cod. Z19-23**

**Mod.:**

Face-to-face

**Edition**

2023

**Activity type**

Workshop

**Date**

05.Sep - 08.Sep 2023

**Location**

Miramar Palace

**Languages**

English

**Academic Validity**

40 hours

**Web**

<https://atom-tweezers-io.org/workshop-longrange-interaction-in-the-quantum/>

**Organising Committee**



## Description

The 8th international workshop on “Long-range interactions in Quantum Systems” follows seven previous editions (Stuttgart 2014, Palaiseau 2015, Naples 2016, Bad Honnef 2017, Hamburg 2018, Gif-sur-Yvette 2019, Innsbruck 2022). Quantum manybody systems of long-range interacting particles (magnetic atoms, Rydberg atoms, polar molecules, ions...) have become over the last decade one of the most exciting platform for quantum simulation, bringing in the spotlight novel quantum phases and intriguing out-of-equilibrium phenomena. The workshop will take place over three-day. The limited duration and relatively small number of participants (on the order of 70, including speakers) will allow for in-depth presentations, as well as for fruitful exchange of ideas during the informal times such as breaks, social event, and a poster session. In particular, we expect that the poster session will allow younger researchers to present their work and establish connections with each others.

### ORGANIZING COMMITTEE:

Prof. Francesca Ferlaino (University of Innsbruck & Institute for Quantum Optics and Quantum Information (IQOQI), Austria)

Prof. Antoine Browaeys (Institut d’Optique- Palaiseau, CNRS, France)

Dr. Robert Löw (University of Stuttgart, Germany)

### Objectives

The workshop will be an opportunity to discuss recent advances on the physics of Rydberg atoms, magnetic atoms, dipolar molecules, light-induced dipoles and dipolar interactions between artificial atoms and to explore new directions.

### Course specific contributors



## Directed by



**Francesca Ferlaino**

University of Innsbruck and IQOQI

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**Antoine Browaeys**

Laboratoire Charles Fabry (UMR 8501 CNRS) - Institut d'Optique Graduate School

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# Registration fees

REGISTRATION

UNTIL 31-07-2023

GENERAL

Included in the fee

## **Place**

### **Miramar Palace**

Pº de Miraconcha nº 48. Donostia / San Sebastián

Gipuzkoa