



Master School on Quantum Nano- and Opto-mechanics

4-8 July 2016, Barcelona, Spain.

Description

Nano- and opto-mechanical systems are at an exciting frontier in which their interactions and functionalities can be exquisitely tailored, sometimes at the quantum level. This leads to new possibilities for investigating fundamental phenomena such as thermodynamics and nonlinearities, coupling together various quantum degrees of freedom, and developing novel types of sensors. This school is dedicated to exposing masters-level students to modern topics in the field and honing their future research interests. The schedule will include pedagogical lectures on selected topics, research-style seminars, group discussion sessions, student presentations, and lab tours.

Lecturers & Topics:

- Oriol Romero-Isart (Innsbruck): **Levitated optomechanics**
- Amir Safavi-Naeini (Stanford): **Optomechanical crystals**
- Darrick Chang (ICFO): **Atom-optomechanics**
- Adrian Bachtold (ICFO): **Carbon nanotube and graphene mechanics**
- Romain Quidant (ICFO): **Optical trapping and manipulation of nanoparticles**

**International
 Travel
 Fellowships
 Available!!**

The deadline for applications is **Friday 15 April 2016**



Hosted at ICFO - the Institute of Photonics Sciences in Barcelona, Spain, ICFO Schools on the Frontiers of Light aim at giving talented young researchers and students worldwide a first introduction to a thematic research area and a taste of an international research environment. These schools incorporate a dynamic and social learning environment beyond participating in lectures, including group discussions, direct interactions with the lecturers, student talks, poster presentations, and visits to labs.

Supported by the Ignacio Cirac Program Chair and the Fundació Catalunya - La Pedrera, ICFO Schools are open to a limited number of students, selected on the basis of academic merit. International Travel Fellowships are available to outstanding applicants.

For further details and to submit your application, please see frontiers.icfo.eu.