



ICFO Day 2023

The 8th edition of an all ICFO celebration of community

December 19, 2023

ICFO Day is an annual celebration of community in which we explore the interests and achievements of all ICFOians. It is also a moment when we are able to discover the unique talents both in the lab and out, of our colleagues

Thursday afternoon, 14th December, ICFOians got warmed up with what was the 2nd edition of **ICFactor**- a talent show that took place in a packed Nest Hall- in which we discovered a side of some of our colleagues that few knew existed. We were thoroughly entertained and? laughed, cheered and sang along to the performances of these talented ICFOians

The ICFO Day agenda started early on Friday, 15th December, with activities organized at ICFO:

The ICFO Gymkhana (Scavenger Hunt): Postdoctoral researcher Sarah Keary put in motion an initiative many, many months ago to gather amazing images taken by ICFOians in our laboratories using a variety of microscopy techniques. Of the 50+ images submitted, 27 were converted into 80x80 works of art and displayed in shared spaces around the institute. To inaugurate this permanent exhibit, we organized a unique scavenger hunt in which

h participants raced through corridors in search of the images. They competed to identify the subject matter both creatively and scientifically

Lab Tours: Optics laboratories are generally closed, dark spaces. Not so on ICFO Day, when doors are opened and visitors were encouraged to come in and learn what kind of science is developed in the participating research groups. Tours were also offered in the new Nano-Fabrication lab recently opened in the Mir-Puig building

PhD Poster Session: 24 scientific posters were displayed in the Nest Hall and in the ensuing session the PhD authors discussed their work with the ICFO community.

After lunch, ICFOians met back up in the auditorium of the World Trade Center on Barcelona's waterfront, close to the city center. In the first half of the afternoon's agenda, we celebrated science. In the second half, we celebrated ICFOians' contributions and achievements

Session I: Science

Director's presentation: ICFO's director Lluís Torner offered a welcome address

Nobel Prize Talks: Both the 2023 Nobel Prizes in Physics and Chemistry were awarded on topics closely aligned with the work of several ICFO research groups. Professor Jens Biegert, leader of the [Attosecond and Ultrafast Optics](#) group and Maciej Lewenstein, leader of the [Quantum Optics Theory](#) group offered presentations that covered both the awarded experimental work of the Nobel Prize in Physics and the theoretical work that paved the way for this work. Prof F. Pelayo Garcia de Arquer, leader of the [CO₂ Mitigation Accelerated by Photons](#) group presented a talk on the Nobel prize in Chemistry.

Strategic Programs at a Glance: Many have heard of the **PIXSpain** and **QTwist** initiatives in which many of our research groups will be contributing over the coming years. Professors Valerio Pruneri, leader of the [Optoelectronics](#) group and Frank Koppens, leader of the [Quantum Nano-Optoelectronics](#) group, the respective leaders of these programs, offered overviews.

Session II: People

The Alumni Network: Andrea Morales, the Alumni coordinator, honored outgoing and incoming Alumni representatives who volunteer their time and energy to strengthen ICFO through the Alumni Network.

Poster Prizes:?

Natalia Garcia from Academic Affairs presented the **PhD Committee's Poster Prize**. This year with two winners, the prizes went to Sandra Buob, from the [Ultracold Quantum Gases](#) group led by Prof. Leticia Tarruell, for the poster *i*½A strontium quantum-gas microscope: imaging single atoms in an optical lattice ; and to Geng Li, from the Quantum Nano-Optoelectronics group led by Prof. Frank Koppens, for the poster *i*½Mid-infrared fingerprints of twisted bilayer graphene

[ICONS](#) VP Javier Arres and Secretary Rebecca Hoffmann presented the **Popular Vote prize**

This was awarded to Sebastian Haegele from the [Optoelectronics](#) group led by Prof Valerio Pruneri, for the poster *½Holographic amplitude and phase imaging for characterization of ultra-thin and 2-D materials½*

Graduating Class of 2023: All 2023 PhD graduates were invited to attend the ICFO Day and were recognized for the important achievements culminating in the presentation of their doctoral theses

2022 Thesis Prizes: Three ICFO PhD graduates from the 2022 cohort were recognized for their creative and ambitious research

Paolo Abiuso ([Quantum Information Theory](#) group led by Prof Antonio Acin) received the prize for best thesis in the theoretical field for the thesis *½Optimization and Geometry for Quantum Information tasks½*

Dr Ugaitz Elu ([Attoscience and Ultrafast Optics](#) group led by Prof. Jens Biegert) received the prize for best thesis in the industrial field for the thesis *½High-peak-power mid-infrared OPCAs for extreme nonlinear photonics½*

Dario Lago-Rivera ([Quantum Photonics with Solids and Atoms](#) group led by Prof Hugues de Riedmatten) received the prize for best thesis in the experimental field for the thesis *½Remote distribution of quantum states assisted by multimode quantum memories½*

15-year ICFOnians award: ICFO has become what it is today thanks to the contributions of all members of our gifted and diverse community. Five ICFOnians from the management unit were recognized for their 15 years at the institute

Oscar Casellas: Electronics Lab

Noelia Cuesta: Project Unit

Vittoria Finazzi: PPL and ChemLab Technician

Magda Lara: Purchasing

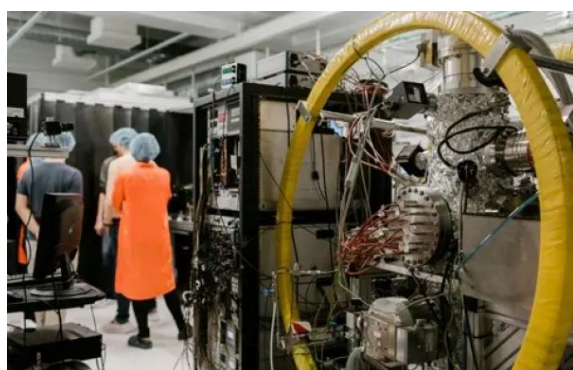
Javier Perez: Nanofabrication Laboratory

And finally, as we do each year, we ended the day with a festive cocktail dinner (and dancing!) where we were able to relax and celebrate in the company of our friends and colleagues.

Many thanks to each and every ICFOnians who contributed to the success of this enormous and important annual event, including those who organized, planned and executed on the logistics side, those who offered talks and tours, created posters, put together the Gymkhana, sang, danced, mixed the music, ... all who participated and connected with the positive energy of this important community event.



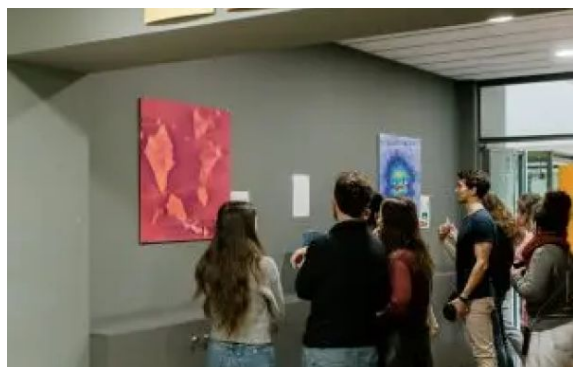
The ICFactor



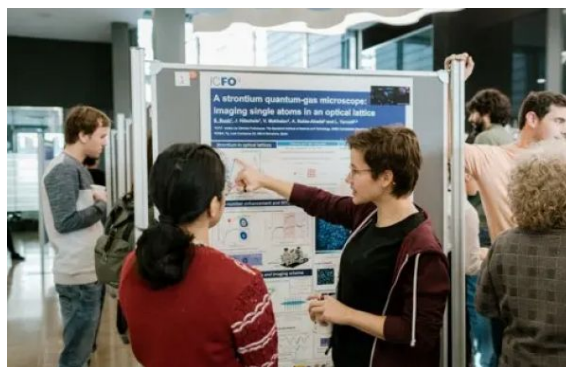
Lab tours



Visit to the new NFL



Gymkhana: Science as Art



Poster Session



The Director's welcome to the Scientific Sessions



Sessions on 2023 Nobel Prizes in Physics & Chemistry, and also the strategic projects PIXSpain & QTwist



Presentation of the PhD Class of 2023



Dr. Paolo Abiuso, Dr Ugaitz Elu and Dr Dario Lago-Rivera win the 2022 ICFO Thesis Award



Celebrating 15 years at ICFO: Noelia Cuesta, Javier Perez and Maeda Lara. (not pictured Oscar Casellas)



A toast to the ICFO community and to a happy 2024



The festive culmination of the ICFO Day