ICFO-TIFRH International School on the Frontiers of Light: Hot Topics in Photonic Sciences

October 25, 2023 to October 27, 2023
TIFR Hyderabad (India)

The school will feature experts from **ICFO**, **TIFRH** and invited speakers in an **intensive 3-day workshop** directed towards students wishing to enter the vibrant field of Photonic Sciences.

Topics covered will include:

Optical Parametric Oscillators
Ultracold Atoms
CO2 Mitigation Accelerated by Photons
Structured Light
Nanophotonic Theory
Biophotonics
THz Photonics

Participants will gain a strong understanding of basic concepts, an introduction to the current state of the art in these topics and mingle with top scientists from leading institutions.

Lecturers:

Majid Ebrahim-Zadeh (ICFO)
Sanjukta Roy (RRI)
Pelayo Garcia de Arquer (ICFO)
Goutam Kumar Samanta (PRL)
Javier Garcia de Abajo (ICFO)
Kanchan Garai (TIFRH)
Sriganesh Prabhu (TIFR)
Hari Varma (Indian Institute of Technology)
Lalit Kumar (Laser Industries Association of India)

Shourya Dutta-Gupta (I.I.T. Hyderabad)
Kavita Devi (Indian Institute of Technology Dharwad)
Manukumara Manjappa (Indian Institute of Sciences)

Lectures and seminars will be also broadcast **online** and are open to registration from interested students and researchers worldwide.

Location:

Hyderabad is home to historic marvels such as the Birla Temple, Charminar and Golkonda Fort. It is among the most diverse, harmonious, and vibrant cities in India with rich Science and Technology base and thriving start-up ecosystem. The school will be locally organize by the?Tata Institute of Fundamental Research (TIFR) Hyderabad, which is one of the premie research institutes in India, together with Hyderabad Photonics Initiative (HyPhI). It is locat d near the Central University of Hyderabad.

The TIFR Hyderabad campus is situated at 36/P, Gopanpally Serilingampally Mandal, Ranga Reddy District, Hyderabad 500 046.

Participants will be hosted close to the campus. Back and forth daily transportation to TIFR Hyderabad will be arranged in buses provided by the school.? Additional information about getting to TIFR Hyderabad can be found here.

School Fees, Registration & Accommodation:

Master Students: Rs 2500/-

PhD students and Postdocs: Rs 3500/-

Accommodation on twin-sharing basis for two nights and, catering will be provided for all students accepted to attend the workshop in-person.

Eligibility:

The school is open to registration from interested students and researchers worldwide.

We welcome applications from individuals worldwide with a variety of backgrounds, including optics, physics, mathematics, electronics, engineering, chemistry and biology.

Candidates must have an excellent academic record, and a strong commitment for scientific research.

Priority will be given to masters-level and advanced undergraduate students, although PhD students and young researchers are welcome to apply.

Persons with disabilities are strongly encouraged to apply. There are no restrictions of citizenship or gender.

How to Apply:

Applicants must submit:

A Curriculum Vitae, including contact details
Scanned copies of your complete (Bachelor and Master equivalent) University academic transcripts in English or Spanish
A one-page (max.) letter describing your background, research interests and motivation for attending the school
Title & abstract for a proposed contributed poster

Applications must be submitted online and all required application material must be complete in order to be considered.

The **deadline** for applications is **8th September 2023**. Successful applicants will be notified during the week of 11th September 2023.

For any questions, please contact us at frontiers@icfo.eu

Note: If you are from a country with visa-obligations to attend the school, please be advised to already inquire (only inquire) regarding the documentation necessary (usually an invitation letter, plus travel and accommodation bookings) and the potential appointment-situation at the local Embassy/ visa-office.

Questions should be directed to hyphi@tifrh.res.in

About:

International 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. The schools incorporate a dynamic and social learning environment beyond participating in lectures, including e.g. group discussions, direct interactions with the lecturers, student talks and poster presentations.

International Frontiers Schools aim to be inclusive and welcoming, and adhere to ICFO's policy on Diversity in Conferences, Meetings and Workshops.

The organizers do not tolerate any type of conduct or behavior considered harassment or bullying and follow ICFO guidelines on Harassment & Bullying.

Participating Institutions:

ICFO - the Institute of Photonic Sciences, is a young research institution that aims to advance the very limits of the science and technology of light, tackling important challenges faced by society at large in all areas of life, including health, energy, information, safety, security and caring for the environment. ICFO is a member of BIST, the Barcelona Institute of Science and Technology.

Tata Institute of Fundamental Research (TIFR)?Hyderabad is a National Centre of th Government of India, funded by the Department of Atomic Energy, as well as a deeme University. The Institute was founded in 1945 with support from the Sir Dorabji Tata Trus under the vision of Dr Homi Bhabha. Tata Institute of Fundamental Research (TIFR) is one o the premier institutes of scientific research in India that works at the very cutting edge o world science, with several specialized centers including National Centre for Radi Astrophysics (NCRA), International Centre for Theoretical Sciences (ICTS), National Centr for Biological Sciences (NCBS) and Homi Bhabha Centre for Science Education (HBCSE). TIF Hyderabad is an ambitious new campus of TIFR spread over 200 acres adjacent to th University of Hyderabad and hosts various branches of fundamental science and technology.

Scientific Organizing Committee:?

Dr. Chaitanya Kumar Suddapalli (TIFR Hyderabad)
Prof. Vandana Sharma, (IIT Hyderabad)
Prof. M.?Krishnamurthy (TIFR Hyderabad)
Dr. Prashant Kumar Singh (TIFR Hyderabad)
Prof. Robert Sewell (ICFO)
Prof. G. V.Pavan Kumar?(IISER Pune)

Dr. Ram Gopal (TIFR Hyderabad)
Dr. Harish Krishnamoorthy (TIFR Hyderabad)
Dr. Rajalakshmi (TIFRH)
Dr. Pranav?R.?Shirhatti ?(TIFRH)?

Advisory Committee:?

Prof. G.Ravindra Kumar (TIFR Mumbai)
Prof. Subhashish Dutta Gupta (TIFR Hyderabad)
Prof. D. Narayan Rao (University of Hyderabad)