

ICFO-TIFRH International School on the Frontiers of Light

24-26 September 2025

Venue: TIFR Hyderabad Auditorium

Program

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| Day-1 24/09/2024 Wednesday | 9.00 – 10.30 am | Registration |
| | 10.30 – 11.00 am | Welcome address |
| | 11.00 – 12.30 pm | Quantum interactions between free electrons and optical fields Prof. Javier García de Abajo ICFO-The Institute of Photonic Sciences, Barcelona |
| | 12.30 – 2.00 pm | Lunch |
| | 2.00 – 3.30 pm | Engineering Berry curvature Physics at buried interfaces in Quantum Material heterostructures Prof. Karthik V Raman TIFR Hyderabad |
| | 3.30 – 4.00 pm | Vander waals magnets: An emerging playground for chiral spintronics Dr. Rana Saha Indian Institute of Science Education and Research Tirupati |
| | 4.00 – 5.30 pm | Coffee break & Interactions @ Posters |
| | 5.30 – 6.00 pm | Detection of low-energy optical responses in quantum materials via millikelvin far-infrared spectroscopy Dr. Ipsita Das, TIFR & ICFO Alumni Princeton University |
| | 6.00 – 7.00 pm | Quintessentially quantum Prof. K. Thyagarajan Formerly at IIT Delhi |
| | 7.00 – 8.00 pm | Dinner |

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| Day-2 25/09/2025 Thursday | 9.00 – 10.30 am | Nonlinear Photonics Prof. Varun Raghunathan Indian Institute of Sciences Bangalore |
| | 10.30 – 11.00 am | Quantum light for secure and multiuser quantum communication Prof. Joyee ghosh, ICFO Alumni Indian Institute of Technology Delhi |
| | 11.00 – 11.30 am | Coffee break |
| | 11.30 – 1.30 pm | Interactions @ Posters & networking lunch |
| | 1.30 – 2.00 pm | Group photo |
| | 2.00 – 3.30 pm | Light in a blink: Harnessing few-cycle pulses for extreme photonics Prof. Jens Biegert ICFO-The Institute of Photonic Sciences, Barcelona |
| | 3.30 – 4.00 pm | Plasma mirror, the optics for ultra-high intensity light Dr. Sudipta Mandal, TIFR Alumni ELI-ALPS, Hungary; Anubal Fusion, India |
| | 4.00 – 4.30 pm | Coffee break |
| | 4.30 – 6.00 pm | Quantum materials in energy applications Prof. T. N. Narayanan TIFR Hyderabad |
| | 6.00 – 6.30 pm | Colloidal quantum dots and their potential optoelectronic applications Dr. Rajesh Bera ICFO-The Institute of Photonic Sciences, Barcelona |
| | 8.00 pm | Frontier school dinner |

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| Day-3 26/09/2025 Friday | 9.00 – 10.30 am | SNSPDs: What's next for the best detectors nature can offer Prof. Cesare Soci Nanyang Technological University |
| | 10.30 – 11.00 am | Physics & applications of optical spin defects Dr. Siddharth Dhomkar Indian Institute of Technology Madras |
| | 11.00 – 11.30 am | High Tea |
| | 11.30 – 12.00 Noon | Opportunities in photonic sciences Dr. Giovanna Pertillo ICFO-The Institute of Photonic Sciences, Barcelona |
| | 12.00 – 12.30 pm | Opening horizons: Making quantum computing a practical reality Dr. Anjani Priyadarsini HPC & Research Lead – Amazon Web Services India |
| | 12.30 – 12.45 pm | Closing remarks |
| | 1.00 – 2.30 pm | Interactions @ networking lunch |