2025 IEEE Summer School and Workshop:

Photonics Automation

Date: July 7, 2025

Location: CUNY ASRC Auditorium



| Time & Type | Speaker & Affiliation | Title | | | | |
|------------------------------------|---|--|--|--|--|--|
| 09:00-09:10 | Viktoriia Rutckaia | Introductory comments | | | | |
| 09:10-09:40 Keynote 1 | Prof. Gabriele Grosso ASRC CUNY | Photoluminescence spectroscopy automation for quantum optoelectronics | | | | |
| 09:40-10:00 Invited 1 | Dr. Matthew C. Strasbourg Columbia University | Practical Python in the lab: high-throughput optical spectroscopy of quantum materials | | | | |
| 10:00-10:20 Invited 2 | Dr. Deepankur Thureja Harvard University | Disentangling weakly coupled modes via global fitting of optical spectra | | | | |
| 10:20-10:40 | Coffee Break | | | | | |
| 10:40-11:10 Keynote 2 | Prof. Haogang Cai NYU | Inverse design of meta-optics using Python | | | | |
| 11:10-11:40 Keynote 3 | Prof. Euclides Almeida Queens College CUNY | Engineering nonlinear metasurfaces for light generation and control | | | | |
| 11:40-12:00 Invited 3 | Sarah Jane Baker ASRC CUNY | Automating data collection using Python | | | | |
| 12:00-13:30 | Lunch Break, Lab Tours | | | | | |
| 13:30-14:00 Keynote 4 | Prof. Eileen Otte University of Rochester | Beyond the Beam: The Potential of Light's Structure | | | | |
| 14:00-14:20 Invited 4 | Dr. Michael de Oliveira ASRC CUNY | Shaping Light on Demand (with a Few Lines of Code) | | | | |
| 14:20-14:50 Keynote 5 | Prof. Samantha Roberts ASRC CUNY | Generative AI for research | | | | |
| 14:50-15:10 Invited 5 | Dr. Pratap Chandra Adak CCNY CUNY | Magnon-mediated exciton-exciton interactions in a van der Waals antiferromagnet | | | | |
| 15:10-15:30 | Coffee Break | | | | | |
| 15:30-15:45 Industry Session | James Scholz | _ | | | | |
| 15:45-16:00 Contributed 1 | - | _ | | | | |
| 16:00-16:15 Contributed 2 | _ | _ | | | | |
| 16:15-16:30 Contributed 3 | _ | - | | | | |
| 16:30-16:35 | Viktoriia Rutckaia | Closing remarks | | | | |