

Symposium on Photonics Science and Technology

2025 Fitzpatrick Institute for Photonics (FIP) Annual Meeting
March 10-11, 2025, Duke University

TENTATIVE ADVANCE PROGRAM AGENDA

Monday, March 10, 2025 (Fitzpatrick Center) - Afternoon Session

12:30-1:00 pm **Registration**

1:00- 1:05 pm **Introduction**

Tuan Vo-Dinh, Director of the Fitzpatrick Institute for Photonics, R. Eugene and Susie E. Goodson Professor of Biomedical Engineering and Professor of Chemistry, Duke University

Opening Welcome Address

1:05-1:10 pm **Alec D. Gallimore**, Provost and Chief Academic Officer
Alfred J. Hooks E '68 Distinguished Professor in the Thomas Lord Department of Mechanical Engineering & Materials Science
Duke University

1:10-1:15 pm **Jerome Lynch**, Vinik Dean, Pratt School of Engineering
Professor in the Department of Civil and Environmental Engineering
Professor in the Department of Electrical & Computer Engineering
Duke University

1:15-2:55 pm **Session 1: Special Topic – *Envisioning the Invisible***

1:15-1:45 **Invited Lecture**

Guosong Hong, Assistant Professor of Materials Science and Engineering
Stanford University

1:45-2:15 **Invited Lecture**

Alon Greenbaum, Assistant Professor
College of Engineering
NC State University

2:15-2:35 **Sönke Johnsen**, Ida Stephens Owens Distinguished Professor
Department of Biology
Duke University

2:35-2:55 **Junjie Yao**, Associate Professor of Biomedical Engineering
Duke University

2:55-3:20 pm **COFFEE BREAK**

3:20-4:20 pm **Session 2: Advanced Technologies: From Quantum to Nanosystems**

3:20-3:40 **Miaofang Chi**, Professor of Mechanical Engineering and Materials Science
Duke University

3:40-4:00 **Crystal Noel**, Assistant Prof. of Electrical and Computer Engineering
Duke University

4:00-4:20 **John W. Hickey**, Assistant Professor of Biomedical Engineering
Duke University

4:20-4:30 **COFFEE BREAK**

4:30-5:30 pm *Special Session 3: ADVANCED PHOTONICS: THE NEXT GENERATION*

Student Lightning Talks
Organized and Presented by the Duke Optical Student Chapter

5:30-6:30 pm

POSTER SESSION & RECEPTION

Posters are exhibited in the Atrium area of the Fitzpatrick Center
FIP Symposium Cocktail Reception in the Atrium area of the Fitzpatrick Center

COCKTAIL RECEPTION
(Light hors d'oeuvres will be served)

Tuesday, March 11, 2025 (Fitzpatrick Center) – Morning Session

9:00-9:10 **Introduction**
Tuan Vo-Dinh, Director of the Fitzpatrick Institute for Photonics, R. Eugene and Susie E. Goodson Professor of Biomedical Engineering and Professor of Chemistry, Duke University

9:10-9:55 **Symposium Keynote**
Moungi Bawendi, *2023 Nobel Prize in Chemistry*
Lester Wolfe Professor of Chemistry
Department of Chemistry
Massachusetts Institute of Technology

9:55-10:00 **FIP Award Presentation – 2025 Pioneer in Photonics Award**

10:00-10:30 **COFFEE BREAK**

10:30- 11:50 **Session 4: Special Topic – Quantum Dots and Advanced Nanomaterials**

10:30- 11:00 **Invited Lecture**

Jillian Dempsey, Bowman and Gordon Gray Distinguished Term Professor
Deputy Director, Center for Hybrid Approaches in Solar Energy to Liquid
Fuels (CHASE)
University of North Carolina Chapel Hill

11:00- 11:30 **Invited Lecture**

Xiaoshan (Sean) Zhu, Professor of Electrical and Biomedical
Engineering, College of Engineering
University of Nevada

11:30-11:50

Maiken H. Mikkelsen, James N. and Elizabeth H. Barton Associate
Professor of Electrical and Computer Engineering
Duke University

11:50-1:30 pm

LUNCH BREAK

Tuesday, March 11, 2025 (Fitzpatrick Center) - Afternoon Session

1:30-2:50 pm **Session 5** **Special Session in Honor of Dr. Joseph Izatt**
OCT and Beyond: Past Present and Future
Chair: Adam Wax, Duke University

1:30-1:40

Introduction to Special Session and Joe Izatt's Achievements
Adam Wax

1:40-2:10

Invited Lecture

Michael Choma, Associate Professor Adjunct
Radiology & Biomedical Imaging
Yale School of Medicine

2:10-2:30

Cynthia Ann Toth, Joseph A.C. Wadsworth Distinguished Professor of
Ophthalmology
Professor of Biomedical Engineering
Duke University

2:30-2:50

Anthony Kuo, Associate Professor of Ophthalmology
Assistant Professor of Biomedical Engineering
Duke University

2:50-3:10 pm **COFFEE BREAK**

- 3:10-4:30 pm **Session 6** **Special Session in Honor of Dr. Joseph Izatt**
OCT and Beyond: Past Present and Future
Chair: Sina Farsiu, Duke University
- 3:10-3:30 **Adam Wax**, Professor of Biomedical Engineering
Duke University
- 3:30-3:50 **Sina Farsiu**, Anderson-Rupp Professor of Biomedical Engineering
Professor of Ophthalmology
Duke University
- 3:50-4:10 **Al-Hafeez Z Dhalla**, Assistant Research Professor of Biomedical
Engineering, Duke University
- 4:10-4:30 **Ryan McNabb**, Assistant Professor of Ophthalmology
Duke University
- 4:30 pm **SYMPOSIUM ADJOURNS**
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