

OPTICA

Incubator on Optical Implementations of Neural Networks

17 - 19 September 2025

Hosted by:

Demetri Psaltis, École Polytechnique Fédérale de Lausanne, Switzerland
Logan Wright, Yale University, USA
Fei Xia, University of California, Irvine, USA

Wednesday, 17 September 2025

- Afternoon** **Attendees arrive in DC and check into the Royal Sonesta Hotel**
2121 P St NW, Washington, D.C. 20037
- 18:00 EDT** **Welcome Dinner**
Bistrot Du Coin, 1738 Connecticut Ave NW, Washington, D.C. 20009

Thursday, 18 September 2025

- 08:00 EDT** **Breakfast at Optica Headquarters**
2010 Massachusetts Ave NW
- 08:30 EDT** **Welcome Remarks from Optica**
- 08:45 EDT** **Program Overview & Goals**
- 09:00 EDT** **Overview Talks: ONN Applications**
Arka Majumdar, University of Washington, United States
Aydogan Ozcan, University of California at Los Angeles, United States
Bhavin Shastri, Queens University, Canada
Tianyu Wang, Boston University, United States
- 11:00 EDT** **Coffee Break**
- 11:30 EDT** **Group Discussion: Which applications could or should be the first to have broad impact and why?**
- 12:15 EDT** **Lunch at Optica Headquarters**

- 13:00 EDT Overview Talks: ONN Platforms and Devices**
Harish Bhaskaran, University of Oxford, United Kingdom
Zaijun Chen, University of California, Berkeley, United States
Will Renninger, University of Rochester, United States
Alex Lvovsky, University of Oxford, United Kingdom
- 15:00 EDT Coffee Break**
- 15:30 EDT Group discussion: Which platform(s) are the most promising and why/why not, and what are the key missing device components needed?**
- 16:30 EDT Status and challenges of scaling up /applying optical computing**
Peter McMahon, Cornell University, United States
- 17:00 EDT Break and Poster Session**
- 18:00 EDT Networking Dinner at Optica Headquarters**

Friday, 19 September 2025

- 08:00 EDT Breakfast at Optica Headquarters**
2010 Massachusetts Ave NW
- 08:30 EDT Additional talks on the status and challenges of scaling up and applying optical computing**
Daniel Brunner, Femto-st, France
Milos Popovic, Boston University, United States
- 09:30 EDT Panel Discussion: What is needed for industry development of optical computing to thrive?**
- 10:30 EDT Coffee break**
- 11:00 EDT Group Discussion: What are the big results we need to see from academia for the field of optical computing to thrive?**
- 12:00 EDT Lunch & reporting of summary of last sessions**
- 13:00 EDT Wrap-up/Discuss Next Steps**
- 14:00 EDT Adjourn**