

IEEE Seminar – Monday Nov. 28, 4-6 pm, Murray Hill

Primary Sponsor: IEEE North Jersey Photonics Society Chapter

Co-sponsors: IEEE North Jersey Information Theory, AP/MTT, Robotics and Automation Theory Chapters; IEEE METSAC

Where have Passive Optical Networks for Broadband Access Been, Where Are They now, and (Mostly) Where Are They Going and Why?

Speaker - Ed Harstead, Lead Technology Strategist and Bell Labs Fellow, Nokia

Abstract - Passive optical networks (PON) have had considerable and increasing commercial success over the past two decades, and there is no end in sight. In this presentation we will talk about how we got here, why TDM PONs continue to hold off any need for WDM-based PONs, what are the drivers for the development of next generation PONs, what technologies are required, and at what point will IM-DD technology have to give way to coherent.

Ed Harstead is the Lead Technology Strategist at Nokia and a Bell Labs Fellow. He received MSME and MSEE degrees from Columbia University, New York. In the 1990s, he led the first generation of WDM PON research efforts with Bell Labs followed by standardization and implementation of first gen TDM PON technologies. Ed spent most of the 2000s in DWDM transport and then moved to PON product management (just before coherent!). Since the 2010s he has supported the Nokia CTO for Fixed Networks, with a focus on the standardization of high speed PON in IEEE and ITU-T standards, bandwidth demand forecasting. He has published several key articles on these and other topics in IEEE Communications Magazine and the IEEE Journal of Lightwave Communications.



Everyone is welcome to attend in person, or virtually. Registration is required. Please register by noon, November 28, 2022, by using the following link:

<https://events.vtools.ieee.org/event/register/333020>

A complementary dinner will be provided to registered participants after the presentation.

Agenda - Monday, November 28, 2022

4:00 – 4:15 pm	Welcome – Naresh Chand
4:15 – 5:30 pm	Presentation – Ed Harstead
5:30 – 6:30 pm	Dinner and Networking

Location - Room 6A-106, Nokia Bell Labs, 600 Mountain Ave, Murray Hill, NJ 07974

Non-Nokia employees - please register at the front desk and then proceed to Room 6A-106 to the right of the front desk behind the Nokia Bell Labs Showcase.

Hosts

- Naresh Chand, IEEE North Jersey Photonics Society Chapter Chair
- Adriaan J. van Wijngaarden, IEEE NY/NNJ Information Theory Chapter Chair, IEEE METSAC Chair
- Ajay K. Poddar, IEEE North Jersey Section Chair, IEEE North Jersey AP/MTT Society Chapter

Local Arrangements

- Naresh Chand, nchand@ieee.org, (908) 723 7001
- Amit Mahadevan
- Dora van Veen
- Adriaan van Wijngaarden, avw@ieee.org