Seminar of the IPQ



November 20, 2025

"Al interconnects" Dr. Peter Winzer

Abstract:

We review the reasons behind the massive interconnect needs within AI clusters and discuss solutions that accommodate these needs, from passive copper to highly integrated Silicon photonics, with a view on power, reliability, and operationally viable mass deployments.

CV:

Peter Winzer is the Founder of Nubis, recently acquired by Ciena. Prior to Nubis, he worked at Bell Labs for 20 years, where he set multiple high-speed optical transmission records, contributed to fiber optic communication product developments and live field trials, and led Bell Labs' fiber-optic transmission research.

He has published over 500 scientific papers, holds over 100 granted patents and has been widely recognized with awards including the John Tyndall Award. He was named Bell Labs Fellow, Fellow of the IEEE and Optica, and Fellow of the US National Academy of Inventors. Peter is a Member of the US National Academy of Engineering and holds an honorary doctorate from the Technical University of Eindhoven. He has served as Editor-in-Chief of the Journal of Lightwave Technology, Program Chair of ECOC and Program/General Chair of OFC. He received his Ph.D. in electrical engineering from the Technical University of Vienna, Austria.