



ICFO DAY 2024 Keynote Talk.

ROEL BAETS

December 13, 2024

15:00 to 16:00

Auditorium World Trade Center, Barcelona

Abstract:

Silicon Photonics is a mainstream technology for high speed transceivers for the data center and optical fiber communications market. Now, there is a big demand for higher performance and new functionalities for applications such as advanced computing and AI, microwave photonics, 3D imaging, industrial and medical sensing, quantum technologies, and more. In many cases the current silicon photonics platforms are not capable to address the new needs. New materials and technologies are expected to close the gap. This leads to a much more diverse silicon photonics ecosystem. This is exciting, but also challenging from the perspective of viable industrial supply chains. Some paths forward will be discussed.

Biography:

Roel Baets is an emeritus professor at Ghent University and imec, where he has led the Photonics Research Group, a mixed UGent - imec research team. For many years he has made contributions to research on integrated photonics (silicon, silicon nitride, III-V) and its

applications in datacom/telecom as well as in medical and environmental sensing. He has founded and has chaired ePIXfab, the European Silicon Photonics Alliance, and continues to serve the silicon photonics community at large in advisory roles. He is a Fellow of IEEE, EOS and Optica. He has been recipient of amongst others the 2020 John Tyndall Award and the 2023 IEEE Photonics Award.

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Hosted by: Valerio Pruneri