

Advanced Photonics Integration

Dr. Randal Appleton, Harel Frish

Online guests: Contact Carol Jimerson carolj@unm.edu for a meeting link

Speaker Bios:



Harel Frish is a principal engineer working in NM-SPDM, the Silicon Photonics FAB ORG in new Mexico. He leads the group that lead the process Technology development and process pathfinding roadmap for Silicon photonics. The team is responsible to explore and develop next generation optical components, such as more advanced lasers, faster modulators and other process capabilities for Intel SiPho process nodes. Harel leads the collaboration of the process TD/PF group with various organization within Intel and outside of it, among other collaborating with Intel Labs, TR, external universities, government-funded projects, and start-up collaborations.



Dr. Randal Appleton is a Principal Engineer at Intel Corporation. He manages silicon photonics process architecture and new product integration for Intel's 300mm silicon photonics fabrication line where he is responsible for assessing photonics product needs against fab process capability, process requirements for new photonic device blocks, and timely development of new nodes to industry quality standards. Randal started his Intel career as a process engineer for CMOS logic nodes before moving into silicon photonics, where he brought up Intel's first single crystal Ge deposition process for photodetection applications and matured the heterogeneous hybrid laser process to launch the industry-leading high volume silicon photonics platform used to ship >8 million transceivers and >32M integrated lasers. Randal received his B.S. in Physics from Arizona State University, his M.S. in Physics from the University of Illinois at Urbana-Champaign, and his Ph.D. in Materials Science from the University of Illinois at Urbana-Champaign where he studied epitaxial thin film growth.

11 a.m., Friday, March 7th, Room 103 at CHTM, 1313 Goddard St. SE

Abstract: We present an overview of Intel's latest advancements in silicon photonics integration. Integration occurs in three distinct arenas including on-die, on-package, and within-system. An advanced silicon photonics portfolio allows complex photonic integrated circuit fabrication at volume. Focus will be paid on the building blocks of the photonic integrated circuit.

FOR GUESTS WHO WILL ATTEND IN PERSON, PLEASE RSVP TO

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