Seminar

The Future of Data Transfer and Computing

Shashank Pandey

Intel Corporation, Hillsboro, USA

The talk aims to address our ever-increasing appetite for high-speed data communication and faster computing. The adoption of fundamental shift in technology to Terahertz (THz) frequency range for short range communication and the industry's roadmap to circumvent the saturation of Moore's law for compact device integration of Integrated Circuits (ICs) will be presented.

In the first part of the talk to address the next generation of data communication a) coherent generation and detection of THz wave using a table-top lab setup and b) THz devices such as waveguides, filters and multiplexers which have been designed and physically realised will be presented. In the second part of the talk, industry first realisation of power via technology in semiconductor ICs will be addressed.

Tuesday, Apr 25th 2023

04:00 PM (Tea / Coffee 03.45 PM)

Auditorium, TIFR-H