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NATIONAL PHD SCHOOL IN
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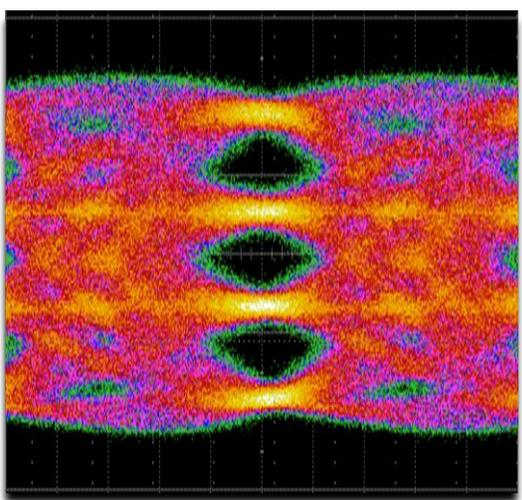
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November 13th, 4 PM
Magenta Seminar Room
Dept. ECBE, D Floor

Marvell powering the AI era: A 5nm 800Gb/s Transceiver for PAM-4 Optical Direct-Detection applications

Speakers: Marco Sosio, Fulvio Martinelli (Marvell Technology Italy)



Abstract: Marvell, a fabless semiconductor company headquartered in Silicon Valley, offers a comprehensive portfolio of data infrastructure solutions for the AI landscape. The Marvell team in Pavia is specialized in the design and validation of high-speed transceivers in the most advanced technology nodes. In this seminar an 8x100Gb/s electro-optical transceiver for PAM-4 optical interconnects in 5nm FinFET technology will be presented. This transceiver comes with three transmitter variants to drive various optical devices. The receivers are DSP based, featuring an analog front end with a Variable Gain Amplifier and an ADC. The presentation will provide an introduction to the application and an overview of the architecture and key components.