PENNSTATE

THE EMRSSS AREA SEMINAR

(EE 500 GRADUATE COLLOQUIUM)

Fall 2009

You are cordially invited to

The EMRSSS Area Seminar

Entitled

"Applications of CMOS Photonics to Wireline Networking via Fiber Optic Interconnects to 100G"

By

Stephen Hart et. Al.

The talk will take place on

October 13, 2009
4:00 pm

At

225 EE West Building

Talk Abstract:

In this presentation, the application space for wireline networking to 100G via fiber optics will be reviewed as well as an emerging technology required to enable it. CMOS Photonics is an enabling technology providing for a solution that is both "Green" and data-rate scalable in a manner unparalleled by traditional technologies in this segment. The design considerations for reducing to practice a fiber optic interconnect for this industry with emphasis on CMOS Photonics will be presented.

Speaker's Bio:

Stephen Hart is a Research and Development (R&D) Project Manager at Lightwire Inc in Allentown, PA currently working on the development of transceivers for 10 Gigabit Ethernet using CMOS Photonics. Prior to joining Lightwire, Mr. Hart was R&D Manager at Avago Technologies, Fiber Optic Products Division (successor in interest to Agilent) in charge of the development of traditional VCSEL based parallel optic products with applications such as InfiniBand and Ethernet Switching. He was also responsible for the development of single channel transceiver products, both copper and fiber optic, up to 4 Gbps at Agilent Technologies, Fiber Optic Products Division. Prior to joining Agilent Technologies, Mr. Hart was a Program Officer at the Office of Naval Research in Arlington, VA responsible for technology development for antenna remoting via fiber optics along with Radar Cross-Section (RCS) reduction in the microwave/milli-meter wave range. Mr. Hart holds a BSEE from the Pennsylvania State University along with an MSEE from the University of California, San Diego.