



Svenska OptikSällskapet  
Swedish Optical Society  
the Swedish Branch of the European Optical Society



Vad händer i Stockholm inom **optiken**?

Välkommen på ett **kvällsseminarium** under ca. en timmes tid

**Torsdagen den 27 oktober 17.30 – 18.30**

**KTH-Kista, Isafjordsgatan 22, Electrum  
plan 3, section C, FMI seminar room**

*Prof. Lars Thylén, Photonics group, ICT school, KTH*

***Integrated photonics in the future: Silicon, plasmonics or something else?***

The possibilities for an “electronics like” development of integrated photonics according to Moore’s law are discussed with reference to the different materials and device technologies at hand. Emphasis will be on plasmonics and its prospects, such as limits to scaling of plasmonics based integrated photonics circuits to higher spatial densities. Other materials are also discussed, giving several examples of integrated photonics devices with reduced footprint and power dissipation and enhanced functionality.

*Prof. Gunnar Jacobsen, CTO Broadband and Manager SICT Center IBBC Acreo AB*

***Coherent optical transmission systems – history, recent developments and expectations to future research***

The Internet, Facebook and connected streaming applications currently imposes requirements to the network capacity which increases with 50 – 100 % per year. This means that the fiber capacity must be utilized effectively in terms of reach and bandwidth. Coherent optical transmission systems provide efficient ways of doing this. Currently single system capacities of around 10 TB/s and aggregated fiber capacities of more than 100 TB/s have been demonstrated using n-level PSK, QAM and OFDM implementations. The talk will outline how coherent optical transmission systems are implemented and list important current research trends.

följt av

**OPTOPUB 18.30 –20.00**

för alla som vill prata optik och fotonik eller annat

***OBS!! Alla som föranmält sig bjuds på mat av:  
ADOPT, Linné center i Modern Optik och Fotonik.***

**Viktigt: Föranmälan till [sergeip@kth.se](mailto:sergeip@kth.se) för mat!!!**

**Senast onsdag 26/10 före kl.13:00 !!!**

*Sergei Popov  
Ari T. Friberg*

*Saulius Marcinkevicius*