

DTU High Tech Summit 2019

INCOM Track, 30 October

DTU, Anker Engelunds Vej, 2800 Kgs. Lyngby

Meeting Centre 2, Bldg 202/R8003

Main track: IoT

Sub-track: Green Internet

The global Internet traffic has grown 1000 times since year 2000 and is still growing fast. It is responsible for 2% of the global CO₂ footprint and consumes around 9% of the world's electricity production - but it also abates 1.5 times its own carbon footprint. All in all the Internet has a green liability but is definitively also part of the solution to the UN Global Goals for Sustainable Development.

The INCOM project aims at developing components and subsystems for next generation communications infrastructure enabling IoT, 5G, and Industry 4.0. INCOM embraces key players from industry and academia with an overall goal to accelerate green-growth and investments in the Danish telecom cluster.

Time	Programme	Start
10.45-12.35	Introduction: Niels Hersoug, Head of INCOM Project, DTU Fotonik	10:45
	Keynote Speaker: Leif K. Oxenløwe, Professor, Chairman of INCOM Steering Committee and Principal Investigator, DTU Fotonik. Talk: 'Is the Internet green?'	10:50
	Data Centre Infrastructures	
	'Space division multiplexing', Neethu Mariam Mathew, PhD, DTU Fotonik	11:05
	'Energy efficient OvS offloading using a SmartNIC', Jesper Birch, FPGA Liaison Manager, Napatech	11:20
	'Integrated high-power lasers on generic platforms', Lars Nielsen, Postdoc, Aarhus University	11:35
	Core Network Infrastructures	
	'Low noise lasers, their combs and applications', Asger Sellerup Jensen, Dr., NKT Photonics	11:50
	'400G and beyond 1Tbit/s FEC for Core and DCI', Søren Forchhammer, Professor, DTU Fotonik	12:05
	'5G Wireless Infrastructure - The fronthaul challenge', Thomas Gerner Nørgaard, CEO and Founder, Comcores	12:20
14.30-16.30	Introduction: Niels Hersoug, Head of INCOM Project, DTU Fotonik	14:30
	Keynote Speaker: Dag Lundén, Environmental Manager, Telia Company Talk: 'Saving the climate at the speed of light! - Telia's green agenda in the past, present and what to come...'	14:30
	Overview	
	'Energy efficiency in global computing infrastructure', Henning Lysdal, VP Photonics Architecture, Mellanox Technologies Ltd.	14:45
	Access Network Infrastructures	
	'End to end IoT Security', Mohammed Seifu Kemal, IoT Security R&D Engineer, Develco Products	15:00
	'Changing horses in the middle of a stream', Jesper Bevensee Jensen, CTO and Founder, Bifrost Communications	15:15
	Innovation Management	
	'Ultrafast Graphene-Si Hybrid Photodetector with high responsivity', Siqi Yan, Postdoc, DTU Fotonik	15:30
	'Time lenses for PON Systems', Pengyu Guan, Senior Researcher, DTU Fotonik	15:45
	Social Impact	
	'How Zetland made their data greener', Theis Ehler Molin, Journalist, Zetland	16:00
	Announcement of Award	
	INCOM Proof-of Concept Grant	16:15
Facilitator	Niels Hersoug, INCOM Head of Project	
Track coordinator	Charlotte M. Larsen, INCOM Office	