

Photonics Hellenic symposium (PHOS)

7-8 OCT 2024

FORTH Central Auditorium

Day 1: Monday, October 7

09:30 - 09:50 | Registration

09:50 - 10:00 | Welcome

10:50 - 11:00 | **Petros Koumoutsakos** - (Harvard University)

11:00 - 11:30 | **Avramopoulos Hercules** (NTUA) - *Art and Craft in Photonics Integration: from bulk optics to chips and apps*

Session 1

11:50 - 12:00 | **Bogris Antonis** (University of West Attica - UniWA) - *Photonics for computing, communications, sensing and security - RNCP lab activities*

12:00 - 12:10 | **Daskalakis Konstantinos** (Turku University, Finland) - *Photonics Research in the Luminus Materials and Devices group at the University of Turku*

12:10 - 12:20 | **Efremidis Nikolaos** (University of Crete) - *Thermodynamic description of multimoded optical systems*

12:20 - 12:30 | **Grigoropoulos Costas** (University of California, Berkeley) - *Laser Processing and Diagnostics of Nanomaterials*

12:30 - 12:40 | **Farsari Maria** (FORTH Greece) - *3D micro & nano printing with light*

12:40 - 12:50 | **Georgakoudi Irene** (Dartmouth College) - *Label-free, two photon functional tissue imaging*

12:50 - 13:00 | **Kafesaki Maria** (University of Crete) - *Chiral metamaterials for advanced electromagnetic wave control*

13:00 - 13:10 | **Kakarantzas Giorgos** (NHRF) - *Emerging Frontiers in Dynamic Chirality Control with Metasurfaces*

13:10 - 13:30 | *Coffee Break*

Session 2

13:30 - 13:40 | **Kanellos Giorgos** (NTUA) - *Quantum communications reaching real life deployment in Greece as part of the European Ecosystem.*

13:40 - 13:50 | **Kominis Yannis** (National Technical University of Athens) - *Complex Dynamics and Applications of Coupled Semiconductor Lasers*

13:50 - 14:00 | **Lidorikis Lefteris** (University of Ioannina) - *Modelling of optoelectronic devices*

14:00 - 14:10 | **Madamopoulos Nicholas** (CUNY) - *The optics/photonics toolbox*

14:10 - 14:20 | Makris Konstantinos (University of Crete) - TBC
14:20 - 14:30 | Nikolopoulos Giorgos (FORTH Greece) - *Quantum Optics and Technology*
14:30 - 14:40 | Ntziachristos Vassilis (TUM Germany & FORTH Greece) - TBC
14:40 - 14:50 | Papadaki Georgia (ICFO, Spain) - *Thermal Photonics*
14:50 - 15:00 | Papadopoulos Ioannis (NTUA) - *Biosensing based on miniature laser sources*
15:00 - 15:10 | Papanikolaou Nikos (DEMOKRITOS) - *Review of photonics related activities at the INN, NCSR "Demokritos*
15:10 - 15:40 | *Lunch*

Session 3

15:40 - 15:50 | Papazoglou Dimitris (University of Crete) - *Multi-dimensional structured light, design and applications*
15:50 - 16:00 | Pissadakis Stavros (FORTH Greece) - *Photonic Materials and Devices Laboratory: research agenda and prospects for collaboration*
16:00 - 16:10 | Pleros Nikos (Aristotle University of Thessaloniki) - *Photonics in computing and communications*
16:10 - 16:20 | Politi Tania (University of Patras/University of Peloponnese) – *Photonics for 5G/6G networks and other applications*
16:20 - 16:30 | Psaltis Demetri (EPFL) - *Optical Information Processing*
16:30 – 16:40 | Riziotis Christos - (NHRF) – *Engineering Photonic Structures and Optical Materials towards Devices Development*
16:40 - 16:50 | Zacharakis Giannis (FORTH Greece) - *Extending the limits of microscopy: looking and listening to complex biological systems*
16:50 - 17:00 | Tachtsidis Ilias (UCL) - *Brain Haemodynamic and Metabolic in-vivo optical sensing with NIRS: MetaboLight*

17:00 - 17:10 | *Coffee Break*

Poster Session

17:10 - 18:00 | Poster Presentations

Session 4

18:10 - 19:50 | PHOS Elections

20:00 | *Dinner (Atrium)*

Day 2: Tuesday, October 8

09:30 - 10:00 | Keynote Lecture: Barbastathis George (MIT) - *On the use of machine learning for optical real-time monitoring of complex processes*

Session 1

10:00 - 10:10 | Simos Christos (University of Thessaly) - *Research activities of Photon XLab Laboratory (Dept. of Physics, Univ. of Thessaly)*

10:10 - 10:20 | Siviloglou Georgios (SUSTech) - *Quantum optics in cold atomic ensembles*

10:20 - 10:30 | Stratakis Manolis (FORTH Greece) - *Ultrashort pulsed laser engineering of biomimetic surfaces*

10:30 - 10:40 | Syvridis Dimitrios (National and Kapodistrian University of Athens) - *Photonics Based Security Solutions for the Future Telecommunication Networks*

10:50 - 11:00 | Tasolamprou Anna (NTUA) - *Advanced Electromagnetic Wave Control in Complex Media*

11:00 - 11:10 | Tomkos Ioannis (University of Patras) - *The role of photonics-enabled optical communications systems and networks in the 6G era*

11:10 - 11:20 | Tsakmakidis Kosmas (NTUA) - *Topological rainbow trapping*

11:20 - 11:30 | *Coffee Break*

Session 2

11:30 - 11:40 | Tsilipakos Odysseas (NHRF) - *Metasurfaces and 2D materials for free-space and guided-wave photonics*

11:40 - 11:50 | Tzortzakis Stelios (University of Crete) - *Tamed intense ultrafast Laser and THz fields: Science and Applications*

11:50 - 12:00 | Vainos Nikolaos (University of Patras) - *TBC*

11:50 - 12:00 | Vasdekis Andreas (University of Idaho) - *TBC*

12:00 - 12:10 | Vyrsoinos Konstantinos (Aristotle University of Thessaloniki) - *Photonics Integrated Circuits for Sensing and Quantum Random Generators*

12:20 - 12:30 | Zervas George (UCL) - *Photonics, Networks and AI*

12:30 - 12:40 | Pelekanos Nikos (University of Crete) - *Delving into Semiconductor Nanophotonics*

12:40 - 13:00 | *Closing Remarks*

13:00 - 14:00 | *Lunch*