

CLP DAY

AI for Photonics, and Photonics for AI

Tuesday October 14, 2025

PROGRAM

- 9:00-9:30 **Welcome coffee and registration**
- 9:30-9:35 **CLP Day Welcome**
Silvia Carrasco, Vice Director of Innovation, Sponsored Research and Public Engagement at ICFO
- 9:35-10:10 Session 1: AI for Photonics
Compiling Machine Intelligence onto Optoelectronic Systems
Dirk Englund
Prof. at MIT | CEO of Axiomatic AI
- 10:10-10:45 **The Power of AI for Photonic ICs design**
Sander Roosendaal
R&D Engineering Director at Synopsis Photonic Solutions
- 10:45-11:05 **Coffee break**
- 11:05-11:40 Session 2: Photonics for AI
Analog optical computer for AI inference and beyond
Doug Kelly
Senior Researcher at Microsoft Research
- 11:40-12:15 **Accelerating personalized medicine through photonics and AI**
Henkjan Gersen
Head of Innovation at iLoF | Honorary Industry Prof. at U. of Bristol
- 12:15-12:45 **Roundtable discussion: Photonics for AI and AI for Photonics**
Moderated by Alina Hirschmann, Head of Communications at ICFO
- 12:45-13:30 Session 3: Ecosystem initiatives
Overview of European funding in AI technologies
Luis Álvarez, Partner at EY
BSC AI Factory: an AI-oriented supercomputing service environment
Mariona Sanz, Head of Innovation & Business Development at the Barcelona Supercomputer Center
PIXEurope: European Pilot Line on Advanced Photonic Integrated Circuits
Valerio Pruneri, ICFO Group Leader & PIXEurope Pilot Line Director
- 13:30-14:30 **Event picture and networking lunch**
- 14:30-17:00 **Scheduled meetings**



SPEAKERS



Silvia Carrasco (PhD, MBA), Vice Director of Innovation, Sponsored Research and Public Engagement at ICFO. Since joining ICFO in 2006, Silvia has built and led the Knowledge and Technology Transfer (KTT) Team, a group of 15 professionals driving innovation, technology transfer and outreach initiatives, managing a 150+ patent family portfolio, overseeing the Corporate Liaison Program, and contributing to the launch of 14 spin-off companies through ICFO's LaunchPad incubator.



Dr. Dirk Englund, Prof. at MIT | CEO of Axiomatic AI. Dirk is Professor of Electrical Engineering and Computer Science at MIT and co-founder of Axiomatic AI. He received his PhD in Applied Physics from Stanford and held a postdoc at Harvard. His research has spawned multiple start-ups, with focus on developing photonic systems for both quantum and classical information processing.



Dr. Sander Roosendaal, R&D Engineering Director at Synopsis Photonic Solutions. Sander is senior R&D leader for Photonic Systems at Synopsys, driving the Photonic Integrated Circuit design suite. He holds a Ph.D. in Physics from Utrecht University and has led R&D programs at Philips Research and Honeywell Aerospace. His expertise spans photonics, software development, innovation, and interdisciplinary projects.



Dr. Doug Kelly, Senior Researcher at Microsoft Research. Doug works for Microsoft, focusing on storage, communications, and compute across data centers. He holds a Ph.D. in biomedical optics from Imperial College London and has experience in DNA sequencing device development. His expertise spans biomedical imaging, optical technologies, and high-performance computing.



Prof. Dr. ir. Henkjan Gersen, Head of Innovation at iLoF | Honorary Industry Prof. at U. of Bristol. Henkjan is an interdisciplinary nanoscientist with 25+ years of expertise in nanophotonics, integrated photonics, spectroscopy, and scanning probe microscopy. At iLoF, he drives the discovery & development of cutting-edge in vitro medical devices, combining photonics, machine learning and interdisciplinary science.



Dr. Alina Hirschmann, Head of Communications at ICFO. Alina leads the Communications team within Innovation, Sponsored Research and Public Engagement, focusing on translating cutting-edge research into public engagement, and coordinating communication and dissemination in European projects. She holds a PhD in Astrophysics and a master in Communication Management.





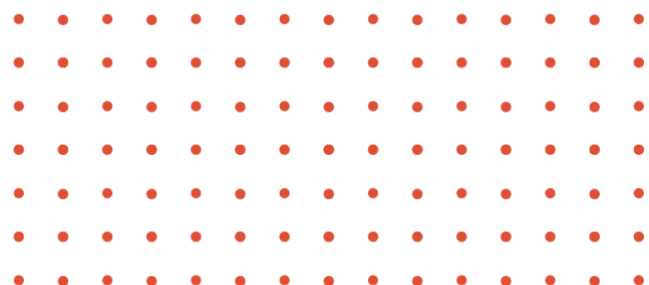
Luis Álvarez, Partner at EY - Telecommunications, Media, and Technology. Luis is a Partner in consultancy firm EY, with 17+ years' experience in public/private funding and tax incentives for innovation projects. He leads the Telecommunications, Media, and Technology sector in EY Spain and has extensive expertise across AI, semiconductors, quantum technologies, telecom, and defense.

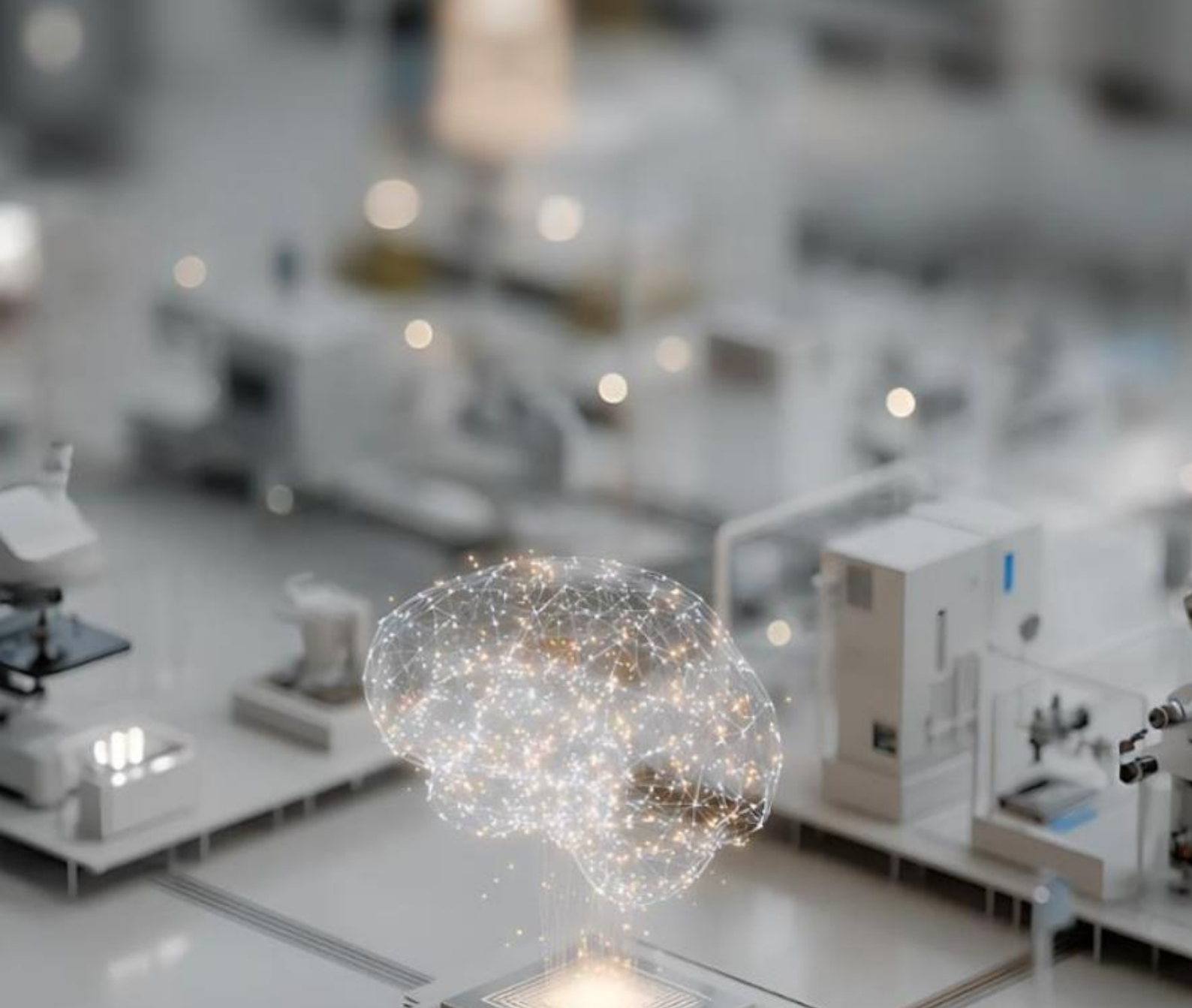


Mariona Sanz, Head of Innovation & Business Development at the Barcelona Supercomputer Center (BSC). Experienced leader in innovation, business development, and European funds. As Director of Innovation at BSC she is responsible to manage AI Factory Services. She is former Director of EU Funds for the Government of Catalonia and founder of Girbau LAB. She holds a degree in Economics and qualifications from ESADE and IESE.



Dr. Valerio Pruneri, ICFO Group Leader and PIXEurope Pilot Line Director. Valerio is an ICREA Professor, Corning Inc. Chair, and leader of the Optoelectronics group at ICFO. He holds a Ph.D. from the University of Southampton. His group has developed photonics, quantum, sensing, and display technologies, leading to the creation of four spin-offs; since 2025, he serves as Director of PIXEurope.





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