

ICFO Alumnus Valerio Di Giulio receives 2025 EPS-QEOD Thesis Prize

Valerio Di Giulio, former researcher at ICFO within the research group led by ICREA Prof. at ICFO F. Javier Garcia de Abajo, receives this prestigious award for theoretical advances in the theory of quantum optics with free electrons.

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Every year, the European Physical Society - Quantum Electronics and Optics Division (EPS-QEOD) highlights scientific excellence in the field by promoting internationally recognized awards and prizes to senior and younger scientists who have excelled in their work.

This year, the 2025 EPS-QEOD Thesis Prize for fundamental aspects has been awarded to **Valerio Di Giulio**, for i¿½theoretical advances in quantum optics with free electrons, includi g pioneering contributions to electron coherence and the application of nanophotonics o electron-positron pair productioni?

½. Former researcher at ICFO and currently working at Max Planck Institute for Multidisciplinary Sciences and at the University of Gottingen, Gottingen, Germany, Valerio Di Giulio bega

his scientific career earning his bachelor's and master's degrees in theoretical physics with honors from La Sapienza Univer
ity. In 2018, he started his PhD at ICFO with ICREA Prof. at ICFO F. Javier Garcia de A
ajo, supported by a Marie Sk?odowska-Curie fellowship. His research focused on tail
ring light-matter phenomena via nanophotonics techniques and on probing and gener
ting quantum-light states in photonic structures with free elect
ons. In 2023 he completed his thesis and in 2024, his PhD thesis was acknowledged with the ICFO PhD Thesis Award as one of the best theses of his promotion. He then moved to th
Max Planck Institute and the University of Gottingen as a postdoctoral researcher and until oday is working with Prof. Claus Ropers studying ultrafast control of electron-beam phase pace densities through structured light and engineered photonic environm
nts. As Valerio Di Giulio highlights after receiving the prize during the award ceremony, i¿? I feel incredibly honored to have received the EPS QEOD Thesis Prize 2025 at CLEO/Eu
ope in Munich, for my PhD work carried out at ICFO under the supervision of Prof. Javier Garcia de Abajo, I would like to express my deepest gratitude to the European Physical Society for this recognition - and especially to Javier and all my colleagues at ICFO for their support, ideas, and inspiration throughout the journey. It's been a real privilege to be part of such a rapidly growing field, which brings together several different communities such as the electron microscopy, photonics, and quantum optics fieldsi¿?

About EPS-QEOD

The European Physical Society (EPS) is a nonprofit association created in 1968 to promote the interests of physics and physicists in Europe. Through its individual members and 42 member societies, the EPS represents more than 130,000 physicists in Europe.??

The Quantum Electronics and Optics Division (QEOD) of the European Physical Society aims to serve its scientific, industrial and educational communities by helping them obtain the latest information on progress in optics, photonics and related fields, to gain visibility for their research, to help them interact with their peers and to develop professionally. QEOD also aims to promote all branches of photonics to the wider scientific community, to decision makers, the business sector and society at large.

A major instrument for achieving its goals is the organization of quality peer-reviewed scientific meetings, including the biennial CLEO/Europe-EQEC conference, which is the largest (about 2000 participants in 2015) and most prestigious in optics, as well as co-sponsorship and administrative aid (through the EPS staff) for smaller topical meetings and workshops.??


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