Community

EOS news

EOS annual meeting EOSAM 2022

https://doi.org/10.1515/aot-2022-0036

On September 12, the European Optical Society convened in Porto, Portugal. The pandemic was not yet over, but at least under control enough for a congress to be held. And so, 360 attendees enjoyed the over 300 presentations during the subsequent week.

The European Optical Society Annual Meeting, EOSAM, is a major international scientific conference covering all aspects of optics and photonics that are presented in topical meetings and special sessions. This year, EOSAM 2022 took place in Portugal, at the Faculty of Engineering of the University of Porto, FEUP, in close collaboration with the Portuguese Society for Research and Development in Optics and Photonics, SPOF, and INESC TEC - Institute for Systems and Computer Engineering, Technology and Science. EOS also collaborated with Sedoptica, PhotonicsFinland, Promoptica, and EPIC for the event. The conference was chaired by Manuel Filipe Costa, President of SPOF, and Maite Flores-Arias, Secretary of EOS as General chairs; Orlando Frazao and Susana Novais, INESC-tec as Local Chairs; and Patricia Segonds, President-Elect of EOS and Gilles Pauliat, President of EOS as Program Chairs.

EOSAM 2022 included a high-quality program within the following 13 topical meetings (TOMs), three special sessions (Early Stage Researcher Session, EU Project Session, Industrial Optics Podium session) with an exhibition and poster sessions:

TOM1: Silicon photonics and guided-wave optics

- TOM2: Computational, adaptive and freeform optics focus on illumination, AR/VR and information driven systems
- TOM3: Optical system design, tolerancing and manufacturing

TOM4: Bio-medical optics

TOM5: Resonant nanophotonics

- TOM6: Optical materials: crystals, glasses, thin films, nanostructures/nanocrystals, metasurfaces, organic molecules and polymers, synthesis ...
- TOM7: Thermal radiation and energy management
- TOM8: Nonlinear and quantum optics
- TOM9: Opto-electronic nanotechnologies and complex systems
- TOM10: Frontiers in optical metrology
- TOM11: Tapered optical fibers, from fundamentals to applications
- **TOM12: Optofluidics**
- TOM13: Advances and applications of optics and photonics

Free tutorials and some special sessions

EOS once again provided tutorials on the topical meeting topics on Monday, 12 September. This year there were nine. They were provided as an additional program, free of charge to all the EOSAM attendees. The tutorials were provided for the first time in 2014 and after a very successful start they have been included in the program ever since and have proved to be highly popular. Up to 140 attendees attended the tutorials this year.

For the sixth time, EOS organized a special session for EU project partners to disseminate their goals and results to the conference audience. This year, nine projects were invited to join this session to present their goals and results.

The Early Stage Researcher Session is specially designed for participants in the first four years (full-time equivalent research experience) of their research careers and who have not been awarded a doctoral degree. PhD students were encouraged to express their ideas and describe their scientific achievements to the conference audience. This year they were invited among those presenting a poster, and six students made very high-level presentations. The audience included mainly students but also older researchers.

EOS-EPIC industrial optics podium

On Tuesday, an industrial optics podium session was held for the first time in co-operation with the European Optical Society, EOS, and the European Photonics Industry Consortium, EPIC. Challenges and solutions from companies were highlighted to researchers by Thorlabs, Toptica, Sphere, and GLOPhotonics. Afterwards, a very nice networking reception was enjoyed by all with live music from the faculty TUNA group, together with drinks and snacks. During the week a two-day exhibition was held with Sphere, Thorlabs, Toptica, GloPhotonics, JEOS:RP and EDP Sciences, with a great buzzing at the booths all week.

From quantum to space optics

Along the week there was a fantastic array of six plenary speakers on various topics, proposed and invited by Topical Meeting chairs:

- Jacqueline Bloch: Polariton quantum fluids in semiconductor lattices
- Rachel Grange: Nonlinear and Electro-Optic Metal-Oxides for Telecom and Sensing Devices
- Joseph Howard: Commissioning the James Webb Space Telescope
- Nuno M. R. Peres: *Metallic gratings covered with 2D materials: a route to polaritonics*
- Arno Rauschenbeutel: Seeing A Single Atom Where It Is Not
- Silvia Vignolini: Light management for control of visual appearance, from nature to applications

Hervé C. Lefèvre also gave a plenary speech to highlight his very high quality review paper recently published in the Journal of the European Optical Society, JEOS:RP that is an open-access peer reviewed journal published by EOS. His paper concerned *Comments about Dispersion of Light Waves*, https://doi.org/10.1051/jeos/2022001.

EOS prize and best paper awards

The EOS Prize was given out to the best paper published in the Journal of the European Optical Society, JEOS:RP for the paper "*Round robin comparison study on the form measurement of optical freeform surfaces.*" Journal of the European Optical Society-Rapid Publications 16.1 (2020): 1–15, by Ines Fortmeier, Reyko Schachtschneider, Vit Ledl, Ondrej Matousek, Jens Siepmann, Antonia Harsch, Rolf Beisswanger, Youichi Bitou, Yohan Kondo, Michael Schulz and Clemens Elster. The purpose of the prize is to encourage a European dimension in research in pure or applied optics. The prize is awarded to the authors of a research paper in the field of any branch of optics, published in the JEOS:RP.

Throughout the week we got to hear some amazing student presentations and the best were awarded at the end of the conference:

- Shahrzad Khajavi for their talk in TOM1: Silicon Photonics and Guided-Wave Optics on Highlyefficient and compact metamaterial surface grating antenna on a 300 nm silicon-on-insulator platform, award sponsored by Evatec
- Giel Keijsers for their talk in TOM8: Nonlinear and Quantum Optics on Superfluid light through dissipation, sponsored by RhySearch
- Duarte Silva for their talk in TOM13: Advances and Applications of Optics and Photonics on Unravelling an optical extreme learning machine, sponsored by Bühler
- Tim Käseberg for their talk in TOM10: Frontiers in Optical Metrology on Nanoform evaluation approach using Mueller matrix microscopy and machine learning concepts, sponsored by EOS
- Tomas Fordey for their poster in TOM10: Frontiers in Optical Metrology on Retardance measurement by spatially probing the sample with optical vortices, sponsored by EOS

Congratulations to all the prize winners!

We aim at publishing a special issue on EOSAM topics in the EOS open-access on-line journal JEOS:RP (Journal of the European Optical Society, Rapid Publications). Submission is open at https://jeos.edpsciences.org/.

New fellows and officers elected

The EOS Annual General Assembly (AGA) was held on Thursday 15 September onsite and online for all EOS members with a report on EOS budget and past and planned activities. Three new elected EOS Fellows were reported during the AGA:

 Roberta Ramponi for her contributions to nonlinear and quantum optics and her leadership within the Optics and Photonics community,

- Alberto Diaspro for the realization and utilization of confocal and two-photon fluorescence microscopy as instrumentation for investigating biophysical phenomena,
- Goery Genty for his achievements in ultrafast photonics and remarkable experiments on nonlinear phenomena in optical systems.

Roberta Ramponi who attended the Annual General Assembly onsite, received her EOS Fellows diploma. Congratulations to all new EOS Fellows!

The newly elected EOS Executive Committee started their work from this date onwards:

- Patricia Segonds, President
- Emiliano Descrovi, President-Elect
- Gilles Pauliat, Past President
- Roelene Botha, Treasurer
- María Teresa Flores-Arias, Secretary to the Board
- Oliver Fähnle, Industrial Advisory Committee Chair
- Thomas Südmeyer, Scientific Advisory Committee Chair

See you 2023 in Dijon!

EOSAM is of course not complete without a lot of networking opportunities. They were especially provided by the welcome reception and all coffee breaks, lunches and the conference dinner. The latter was held in the magnificent Mosteiro São Bento da Vitória with a full rich history and amazing local delicacies.

EOSAM is the flagship event of the European Optical Society, EOS, where the latest results in optics and photonics research are presented. The meeting venue changes annually.

Next year we look forward to seeing everyone at EOSAM 2023 in Dijon, France 11-15 September. For more information about the organization of this next meeting, visit our website www.europeanoptics.org but also do not miss our newletters sent by email and register to our social media on LinkedIn: https://www.linkedin.com/company/eos-european-optical-society/.



The conference dinner was held in the magnificent Mosteiro São Bento da Vitória, an 18th century building with a rich history as a church, hospital, and concert hall. (Copyright EOS).

Community

Conference calendar

The Calendar has been reviewed carefully. Due to further regulations in response to the worldwide pandemic, dates or locations may vary from this list.

Nevertheless, the pandemic has created new opportunities as well. Please visit the website of a conference you missed, or you think you can't travel to. They may have online options for you.

2022 December

Laser Congress and Exhibition

Advanced Solid State Lasers Conference, Applications of Lasers for Sensing and Free Space Communications, Laser Applications Conference Barcelona, Spain 11–15 December 2022 http://www.optica.org/en-us/events/congress/laser_ congress/

2023 January

SPIE Photonics West

San Francisco, CA, USA 28 January–2 February 2023 www.spie.org/pw

SPIE AR | VR | MR

San Francisco, CA, USA 29 January–1 February 2023 https://spie.org/x137983.xml

February

SPIE Advanced Lithography + Patterning San Jose, CA, USA 22 February–2 March 2023 https://spie.org/x138253.xml

March

OFC

San Diego, CA, USA 5–9 March 2023 www.optica.org/en-us/events/global_calendar/events/ optical_fiber_communications_conference_2023/

LASER World of Photonics China

Shanghai, China 22–24 March 2023 www.world-of-photonics-china.com

April

SPIE Defense + **Commercial Sensing** Orlando, FL, USA

30 April–4 May 2023 www.spie.org/dcs

Biophotonics Congress: Optics in the Life Sciences OWLS 2023

Vancouver, British Columbia, Canada 24–27 April 2023 www.optica.org/en-us/events/congress/biophotonics_ congress/

SPIE Optics + Optoelectronics

Prague, Czech Republic 24–27 April 2023 https://spie.org/x138042.xml

UKP Workshop

Aachen, Germany 26–27 April 2023 www-ultrakurzpulslaser.de

May

CLEO 2023

San Jose, CA, USA 7–12 May 2023 www.cleoconference.org

DGaO Tagung

Berlin, Germany 30 May–3 June 2023 https://dgao.de/jahrestagung/

June

LASER World of Photonics World of QUANTUM Munich, Germany

27–30 June 2023 www.laser.de

World of Photonics Congress

Munich, Germany 25–30 June 2023 www.photonics-congress.com/en/

SPIE Conferences @WoP Congress Biomedical Optics Digital Optical Technologies Optical Metrology Munich, Germany 25–30 June 2023 https://spie.org/conferences-and-exhibitions

July

Optica Advanced Photonics Congress Busan, Korea 10–13 July 2023 https://www.optica.org/en-us/events/congress/ advanced_photonics_congress/

August

SPIE Optics + Photonics San Diego, CA, USA 22–24 August 2023 www.spie.org/OP

October

SPIE Optifab Rochester, NY, USA 15–19 October, 2023 https://spie.org/conferences-and-exhibitions/ optifab