

National Optics Congress 2022

November 30 + December 1

Aarhus, Denmark

We look forward to welcoming you in Aarhus for this two-day event organized by the **Danish Optical Society** (DOPS), **LaserLab.dk**, and **FORCE Technology**. This year, in addition to talks and posters, we are delighted to have **three keynote speakers**, pitches from companies, one **research panel** and one **industry panel** co-organized by **Optica** and the **European Physical Society** (EPS).

Venue: **Navitas**, Inge Lehmanns Gade 10, 8000 Aarhus C, Denmark | Auditorium 137

For Bachelor and Master students interested in Optics and Photonics:

- Accommodation is **free of charge** (DTU, KU, SDU, and AAU)
- Transportation is **free of charge** (DTU, KU, and SDU)

November 30, 2022

10:00	Registration
10:20	Welcome messages Asger Jensen , DOPS, Michael Drewsen , LaserLab.dk, and Henrik Mertz , FORCE Technology
Session 1 chaired by TBD	
10:30	Your Reliable Transmission Grating and Spectrometer Supplier Raheleh Hosseinian , Ibsen Photonics (<i>Invited Talk</i>)
11:00	Continuous-Variable Quantum Key Distribution Tobias Gehring , Technical University of Denmark
11:15	Sculpted nanodisks for photonics and sensing Aurelien Dantan , Aarhus University
11:30	High-dimensional optical encodings for integrated error-protected Quantum Computing and Quantum Communication Caterina Vigliar , Technical University of Denmark
11:45	Exploring Cavity Superradiant-Enhanced Sensors Eliot Bohr , University of Copenhagen
12:15	Lunch



Session 2 chaired by TBD

13:30	Frequency Combs and Applications Thomas Udem , Max Planck Institute of Quantum Optics (<i>Keynote Lecture</i>)
14:15	Photonic ICs for the Age of AI Henning Lysdal , Nvidia (<i>Invited Talk</i>)
14:45	1-min pitches from exhibitors
15:00	Coffee break
15:30	Research Panel <i>Current trends in funding: what scientists need to consider in the coming years</i> <ul style="list-style-type: none"> • Morten Bache, Scientific Director at Novo Nordisk Foundation • David Lundbek Egholm, Vice Dean for Research at Aarhus University • Peter Balling, Chairman of the Research Council for Technology and Production at Independent Research Fund Denmark (DRF) • Jens Peter Vittrup, Senior Adviser at Innovation Fund Denmark Moderator: Niels Hersoug , DTU and Sparrow Quantum
16:30	Booths : see list of exhibitors on page 4 Poster Session : see abstracts on page 5

Evening reception at **ARoS**, Aros Allé 2, 8000 Aarhus, Denmark

18:30	Arrival via main entrance (4th floor)
18:30	Welcome drink in front of the restaurant (8th floor)
19:00	Three-course menu with wine pairing and coffee with the dessert
21:30	After-dinner talk in the auditorium (3rd floor) Optics for Astronomy from small to very large scale Frank Grundahl , Aarhus University
23:00	The evening concludes. The museum closes.

December 1, 2022

8:30 Coffee

 Session 3 chaired by TBD

9:00 Shedding light on dynamics and conformations of DNA structures and hybrid devices

Victoria Birkedal, Aarhus University (*Keynote Lecture*)

9:45 Granting businesses access to photonics product development expertise

Henrik Mertz, FORCE Technology

10:00 Scanner Optics for Digital Dentistry

Rasmus Kjær, 3Shape (*Invited Talk*)

10:30 Coffee + Company Booths + Poster Session

11:00 Industry Panel

PhD to CEO series organized by **Optica** and **EPS**

- TBD
- TBD
- TBD

Moderator: **Claus Roll**, Optica

12:00 Lunch

 Session 4 chaired by TBD

13:30 Semiconductor Quantum Dots, why are they so quantum? Genesis, prospects and challenges

Frédéric Grillot, Télécom Paris, France (*Keynote Lecture*)

14:15 Waveguides for Efficient CW Frequency Conversion

Eric J. Stanton, EMode Photonix, USA

14:30 Making steady-state superradiant lasers for active clocks

Stefan Schäffer, University of Amsterdam, the Netherlands

14:45 Manipulating Nonclassical Light with Quantum Metasurfaces

Fei Ding, University of Southern Denmark (*DOPS Award Laureate*)

15:00 Coffee + Company Booths + Poster Session

16:00 Awards Ceremony + Closing Session

- *Best Poster Award* sponsored by **Hamamatsu**
- *DOPS Award* sponsored by **Thorlabs**

17:00 Bus departure from Navitas

Exhibitors

4 Photonics

Coherent

Danish National Metrology Institute (DFM)

Delta Optical Thin Film

Hamamatsu

Ibsen Photonics

Laser Components

Light Conversion

Nanor

NKT Photonics

Thorlabs

Tillquist

UV Medico

Abstracts

TBD