



DOPS

Dansk Optisk Selskab

Dansk Optisk Selskabs årsmøde og Northern Optics 2012

Comwell Borupgaard, Nørrevej 80, 3070 Snekkersten. 19-21 november 2012

Mandag, 19 november, 2012

Registrering 9:00 – 10:00

Mandag, 19 november, 2012

DOPS Generalforsamling 10:00 – 12:00

1. Valg af dirigent
2. Valg af stemmetællere
3. Formandens beretning
4. Valg af formand for 2013
5. Valg af bestyrelsesmedlemmer
6. Valg af suppleanter til bestyrelsen
7. Diskussion af mødeinitiativer i 2013
8. Godkendelse af regnskab for 2011
9. Fremlæggelse af budget for 2012 og 2013
10. Valg af to revisorer
11. Orientering om DOPS' Web
12. Indkomne forslag
13. Eventuelt

Forslag til opstilling af ny formand eller medlemmer/suppleanter bedes meddelt Lars Lindvold, (tlf. nr.: 4677 4969, fax nr.: 4677 4959, e-mail (lali@dtu.dk) inden den 12. november 2012.

Monday, November 19, 2012

Start of Northern Optics and Annual meeting in DOPS

Lunch

..... 12:00 – 13:00

Welcome

Chairman of DOPS Lars Lindvold

..... 13:00-13:15

DOPS Prize and lecture given by the recipient

..... 13:15 – 13:45

DOPS Junior Prize and lecture given by the recipient:

..... 13:45– 14:30

Session I *Lasers and other light sources (1)*

14:30 – 15:30

Chair:

To be decided

VBG locked fiber lasers (*invited*)

Professor Fredrik Laurell, Kungliga Tekniska Högskolan (KTH), Sweden

..... 14:30 – 15:15

Efficient generation of 3.9 W of diffraction-limited green light with spectrally combined tapered diode lasers

André Müller, Ole Bjarlin Jensen, Peter E. Andersen, and Paul Michael Petersen

DTU Fotonik, Department of Photonics Engineering, Technical University of Denmark, Denmark

..... 15:15– 15:35

Coffee, posters and exhibition

..... 15:35 – 16:00

The exhibitors present

A 5 min. presentation from each exhibitor highlighting new products from their company

..... 16:00-17:00

Posters and exhibition & beer

..... 17:00-18:30

Dinner..... 18:30 – 20:00

After-dinner-lecture by Professor Ole Keller: *L.Lorenz and his contribution to optics*..... 20:00 – 21:00

End of first day

21:00

Session II *Biophotonics*

9:00 – 12:00

Chair:

To be decided

Upconverting nanoparticles as contrast agents in biomedical imaging (invited)

Professor Stefan Andersson-Engels, Lunds Tekniska Högskola (LTH), Sweden

9:00-9:45

2D photoplethysmography system for detection pulsative changes in migraine

*Ervin Nippolainen, Nina Zaproudinab, Victor Teplova, Alexei A. Kamshilina, and Rashid Giniatullinc.
Department of Applied physics, University of Eastern Finland, P.O.Box 1627, FI-70211 Kuopio, Finland
Department of Medicine, University of Eastern Finland, P.O.Box 1627, FI-70211 Kuopio, Finland c
Department of Neurobiology, A.I. Virtanen Institute for Molecular Sciences, University of Eastern Finland
P.O.Box 1627, FI-70211 Kuopio, Finland*

9:45-10:05

Towards light-driven micro-robotics (invited)

Professor Jesper Glückstad, DTU Fotonik, Department of Photonics Engineering, DTU Lyngby Campus, Denmark

10:05-10:50

Under consideration

10:50-11:10

Coffee, posters and exhibition

11:10 – 12:00

Lunch

12:00 – 13:00

Session III *Lasers and other light sources (2)*

13:00 – 14:00

Chair:

To be decided

Ultrabroadband supercontinuum generation in bulk solids with few-optical-cycle CEP-stable pulses at 2 μm

J. Darginavičius, D. Majus, V. Jukna, N. Garejev, T. Vasiliauskas, A. Dubietis
Department of Quantum Electronics, Vilnius University, Saulėtekio ave. 9, bldg. 3, LT-10222 Vilnius, Lithuania*

13:00 – 13:20

Ytterbium doped distributed spectral filtering photonic crystal fibers for use at wavelengths above 1100 nm

*S. R. Petersen^a, T. T. Alkeskjold^b, J. Lægsgaard^a
^aDTU Fotonik, Ørstedes Plads, building 343, 2800 Kgs. Lyngby, Denmark,
^bNKT Photonics A/S, Blokken 84, DK3460 Birkerød, Denmark*

13:20 – 13:40

Modal instabilities in very large mode area rod fiber amplifiers

*Mette M. Jørgensen¹, Kristian R. Hansen¹, Marko Laurila¹, D. Noordegraaf², Thomas T. Alkeskjold², Jesper Lægsgaard¹
¹DTU Fotonik, Ørstedes Plads, building 343, 2800 Kgs. Lyngby, Denmark, mmajo@fotonik.dtu.dk
²NKT Photonics A/S, Blokken 84, 3460 Birkerød, Denmark*

13:40 – 14:00

Chair:

To be decided

Automatic Sorting of Heterogeneous Meat Cuts using NIR Interactance Imaging

*Marion O'Farrell¹, Jon Tschudi¹, Kari Anne Hestnes Bakke¹, Odd Løvhaugen¹, Jens Petter Wold²
Vegard H. Segtnan², Ingrid Måge², Martin Kermit³, Frøydis Bjerke⁴
¹SINTEF ICT, Oslo, Norway, ²Nofima Mat AS, Ås, Norway, ³TOMRA Sorting AS, Asker, Norway
⁴Animalia (Norwegian Meat and Poultry Research Center), Oslo, Norway*

..... 14:00–14:20

Will X-ray fish counters perform better than optical fish counters at high capacity?

*Odd Løvhaugen, Grégory Bouquet, Marion O'Farrell, Trine Kirkhus,
Optical Measurement Systems and Data Analysis, SINTEF ICT, Oslo, Norway*

..... 14:20–14:40

Non-contact methods for high power LED junction temperature measurement

*Hans Baumgartner¹, Anna Vaskuri¹, György Andor², Tuomas Poikonen¹, Petri Kärhä¹, and Erkki Ikonen¹
¹Aalto University School of Electrical Engineering, ²MKEH, Hungary*

..... 14:40–15:00

Measurements of non-Lambertian fluorescence emission and absolute quantum yield of fluorescence standards

*Priit Jaanson¹, Farshid Manoocheri^{1,2} and Erkki Ikonen^{1,2}
¹. Aalto University, School of Electrical Engineering, Espoo, Finland
². Centre for Metrology and Accreditation MIKES, Espoo, Finland*

..... 15:00–15:20

Light penetration depth of a turbid media estimated by cross-correlation of speckle patterns

*Igor S. Sidorov,¹ Serguei V. Miridonov,² Ervin Nippolainen¹ and Alexei A. Kamshilin¹
¹Department of Applied Physics, University of Eastern Finland, Kuopio, Finland.
² Optics Department, Centro de Investigación Científica y Educación Superior de Ensenada, México.*

..... 15:20–15:40

Coffee

..... 15:40–16:00

Poster and exhibition

..... 16:00 – 17:30

Dinner

..... 19:00 – 20:30

End of second day

20:30

Session V *Applied Optics*

9:00 – 12:00

Chair:

To be decided

Omnidirectional lenses in automobile safety applications

Mika Aikio

VTT Technical Research Center of Finland, OULU, FINLAND

..... 9:00– 9:20

Structural colours for decorative and security purposes - how to make and mass produce them (invited)

Jan F. Stensborg, CEO

Stensborg A/S, Roskilde, Denmark

..... 9:20– 9:50

3D displays in the digital era (invited)

Steen S.Iversen, CEO

Sirius Aps, Denmark

..... 9:50– 10:20

Coffee, poster and exhibition

..... 10:30– 12:00

Lunch

..... 12:00 – 13:00

Session VI *Quantum Optics*

13:00 – 15.05

Generation and manipulation of quantum states of light (invited)

Professor Klaus Mølmer, Aarhus University, Denmark

..... 13:00 – 13:45

Suppression of temporal spread of ultrashort pulses using Airy-Bessel light bullets

Peeter Piksarv¹, Heli Valtna-Lukner¹, Andreas Valdmann¹, Madis Lõhmus¹, Roland Matt¹ and Peeter Saari^{1,2}

¹Institute of Physics, University of Tartu, Tartu, 51014 Estonia

²Estonian Academy of Sciences, Tallinn, 10130 Estonia

..... 13:45 – 14:05

Utilizing higher order correlations for state characterization in quantum optics

K. Laiho^{1,2}, M. Avenhaus^{1,2} and C. Silberhorn^{1,2}

¹University of Paderborn, Warburgerstr. 100, D-33098 Paderborn, Germany

²Max Planck Institute for the Science of Light, D-91058 Erlangen, Germany

..... 14:05 – 14:25

Wednesday, November 21, 2012

Plasmonic modulator based on finite-thickness metal-semiconductor metal waveguide with gain core

Viktoriiia E. Babicheva, Irina V. Kulkova, Radu Malureanu, Kresten Yvind, Andrei V. Lavrinenko
Department of Photonics Engineering, Technical University of Denmark, Ørsted's Plads, Bld. 343, DK-2800 Kongens Lyngby, Denmark*

..... 14:25 – 14:45

Second-harmonic generation from electron beam deposited SiO films.

*Søren Vejling Andersen and Kjeld Pedersen
Department of Physics and Nanotechnology, Aalborg University, Skjernvej 4A, DK 9220 Aalborg Øst, Denmark*

..... 14:45 – 15:05

DOPS Poster Prize

15:05 – 15:15

Closing of Northern Optics and DOPS annual meeting

15:15-15:20
