

4th Europhotonics Spring School 2015

Venue:

The Europhotonics Spring School will be held in the modern Hotel Aspethera <http://www.hotel-aspethera.de/>. Accommodations for the participants will be available in the same hotel. (Ph. D. students participating in the school are expected to share a double room.)



Travel Information:

By Car:

Paderborn is located at the freeway A33 between Bielefeld (A2) and Haaren (A44).

By Train:

Frequent connections to Paderborn Main Station (Paderborn Hbf.) <http://www.bahn.de>

By plane:

- Paderborn-Lippstadt Airport (PAD): \approx 30 Min. by local bus from Paderborn; frequent flight connections from and to Munich and Palma de Mallorca.
- Hannover Airport: \approx 2 hours by train; many international flights.
- Düsseldorf Airport: \approx 2 hours by train; many international flights.
- Frankfurt Airport: \approx 3.5 hours by train; many international flights.

Expenses:

- Each participant is expected to organize and pay her/his travel (transportation) from and to Paderborn, individually.
- For Erasmus Mundus master students, board and lodging from Monday evening to Thursday noon (double rooms to be shared) as well as conference facilities will be paid directly by the Europhotonics Erasmus Mundus program. Ph. D. candidates are expected to pay a fee of 355,- € to the hotel upon arrival.
- Extra expenses for a single room (if available!) 30 € per night.

Schedule of the Europhotonics Spring School 2015, Paderborn:

	Monday 13 April 2015	Tuesday 14 April 2015	Wednesday 15 April 2015	Thursday 16 April 2015
07:15 – 08:45		Breakfast	Breakfast	Breakfast
09:00 – 10:30		Lecture 1 (Giovannini)	Lecture 4 (Brasselet)	Lecture 9 (Cojocar)
10:30 – 11:00		Coffee Break	Coffee Break	Coffee Break
11:00 – 12:30		Lecture 2 (Silberhorn)	Lecture 5 (Torres)	Lecture 10 (Koos)
12:30 – 14:00		Lunch	Lunch	Lunch
14:00 – 15:30		Excursion to Open-Air Museum Detmold	Lecture 6 (Toninelli)	
15:30 – 16:30			Coffee Break	
16:30 – 17:30		3 PhD talks	3 PhD talks	
17:30 – 19:00	Registration	Lecture 3 (Huber)	Lecture 7 (Hetterich)	
19:00 – 20:30	Dinner	Dinner	Dinner	
20:30 - 22:00	3 PhD talks	Poster Session	Evening Talk, Lecture 8 (As, Meier)	

Program of the Europhotonics Spring School 2015, Paderborn:

Lectures

Talk No.	Speaker	Affiliation	Title
1	Prof. Hugues Giovannini	Institut Fresnel Aix-Marseille Université	Super-resolved microscopy with and without markers using reconstruction techniques
2	Prof. Christine Silberhorn	Universität Paderborn	Quantum optics
3	Prof. Klaus Huber	Universität Paderborn	The „Colloids as Atoms“-Approach: Phase Behavior, Scattering Patterns and Photonic Band Gaps
4	Prof. Sophie Brasselet	Institut Fresnel Aix-Marseille Université	Polarized microscopy for structural imaging in biology
5	Prof. Juan P. Torres	Instituto de Ciencias Fotónicas (ICFO, Castelldefels)	Entanglement; what is it? how to generate it? how to detect it? how to use it?
6	Prof. Costanza Toninelli	Laboratorio Europeo per la Spettroscopia Non-lineare (LENS, Firenze)	Organic molecules for quantum optics
7	Privatdozent Dr. Michael Hetterich	Karlsruhe Institute of Technology	Kesterites - A novel material class for thin-film photovoltaics
8	Prof. Donat As and Prof. Cedrik Meier	Universität Paderborn	Efficient blue light-emitting diodes, which have enabled bright and energy-saving white light sources: The Nobel Prize in Physics 2014
9	Prof. Crina Cojocaru	Universitat Politècnica de Catalunya (UPC, Barcelona)	Managing light in non-linear disordered media: application to ultra-short pulse characterization
10	Prof. Christian Koos	Karlsruhe Institute of Technology	Integrated Photonics and Terabit Communications

Short Talks on Monday, April 13th, 2015

He, Wei (Aix Marseilles University, Inst. Fresnel): "Mapping molecular orientation in 3D"

Sosa, Alberto (Institute of Photonic Sciences, ICFO, Castelldefels): "Shear flow induces changes in ICAM-1 spatial distribution that modulate leukocyte mobility across endothelium"

Nesic, Aleksandar (Karlsruhe Institute of Technology, KIT): "Demonstration of Difference Frequency Generation in a Silicon Slot Waveguide"

Short Talks on Tuesday, April 14th, 2015

Ali Khan, Murtaza (European Laboratory for Non-linear Spectroscopy, LENS, Florence): "Nanometric Surface Probing through Ultra-Cold Atoms"

Ho, Chih-Hua (European Laboratory for Non-linear Spectroscopy, LENS, Florence): "Controllable spatial filtering effect on liquid crystal infiltrated woodpile"

Pateras, Anastasios (Aix Marseilles University, Inst. Fresnel): "3D strain imaging by coherent X-ray Bragg ptychography"

Short Talks on Wednesday, April 15th, 2015

Danilova, Svetlana (Karlsruhe Institute of Technology, KIT): "Optical system design for glucose concentration measurement in the anterior chamber of the human eye."

Suárez Rojas, Noslen (Institute of Photonic Sciences, ICFO, Castelldefels): "High harmonic generation and above threshold ionization in atoms and molecules"

Iha, Ajit (Universitat Politècnica de Catalunya, BarcelonaTech): "Nonlinear dynamics in laser cavity with Optical Feedback for subwavelength sensing"

Posters

P1: Atorf, Bernhard (University Paderborn): "Tunable plasmonic nanostructures with liquid crystals"

P2: Bader, Christina (University Paderborn): "Sub-bandgap excitation of ZnO-based photonic resonators using nonlinear optical processes"

P3: Blumenthal, Sarah (University Paderborn): "Fabrication of two dimensional photonic crystal membranes in cubic AlN"

P4: Brassat, Katharina (University Paderborn): "Variable-distance nanogap electrodes in a microfluidic channel"

P5: Breddermann, Dominik (University Paderborn): "Single-photon emission from a partly stimulated two-photon emission in semiconductor quantum dots"

P6: Brodehl, Christoph (University Paderborn): "Writing billions of tailored plasmonic nanoparticles at once"

P7: Coop, Simon (Institute of Photonic Sciences, ICFO, Castelldefels): "BEC with Tunable Interactions in a Double-Well Optical Potential"

P8: Ezhova, Anna (University Paderborn): "Tailoring of Ag-nanoparticles in Polyacrylate Solutions"

P9: Gheisari, Ali (European Laboratory for Non-linear Spectroscopy, LENS, Florence): "Confocal Light-sheet Microscope for in vivo investigation on Zebrafish Neuronal and Circulatory Systems"

- P10: Hett, Thomas (University Paderborn): "High-Q Whispering Gallery Microresonators based on Silicon Oxynitride"
- P11: Krapick, Stephan (University Paderborn): "Theory of Photon Triplet State Measurements Derived from the Experiment"
- P12: Kushnikovskiy, Dmitry (University Paderborn): "Lyotropic liquid crystal templated synthesis of silver nanoparticles"
- P13: Leier, Yves Alexander (University Paderborn): "Properties of excitonic V-shaped quantum dot systems for optical switches"
- P14: Liu, Quan (Institute of Photonic Sciences, ICFO, Castelldefels): "Efficient interconnecting layer providing 76% fill factor in a tandem polymer solar cell architecture"
- P15: Marin Palomo, Pablo (Karlsruhe Institute of Technology, KIT): "Chip-Scale Frequency Comb Sources for Teratronics and Terabit/s Optical Communications"
- P16: Meyers, Thorsten (University Paderborn): "Integration of self-aligned contacts in organic field-effect transistors for organic light-emitting diode applications"
- P17: Mühlenbernd, Holger (University Paderborn): "Continuous control of surface plasmon polariton excitation by a nanoantenna metasurface"
- P18: Negash, Awoke (Aix Marseilles University, Inst. Fresnel): title yet to be specified
- P19: Nuzhdin, Dmitry (European Laboratory for Non-linear Spectroscopy, LENS, Florence): "Elastomer based light robot and photonic devices"
- P20: Ovyvan, Anna (Karlsruhe Institute of Technology, KIT): "Thermo-optic Mach-Zehnder interferometer (MZI) integrated with nanophotonic structures on Silicon Nitride"
- P21: Quiring, Wadim (University Paderborn): "GaAs-based photonic crystal microcavities with metallic contacts"
- P22: Regmi, Raju (Aix Marseilles University, Inst. Fresnel): title to be specified
- P23: Remesh, Vikas (Institute of Photonic Sciences, ICFO, Castelldefels): title to be specified
- P24: Rueda Delgado, Diana Paola (Karlsruhe Institute of Technology, KIT): title to be specified
- P25: Schädler, Kevin (Institute of Photonic Sciences, ICFO, Castelldefels): "Graphene Hybrid Optomechanics"
- P26: Sridhar, Susmita (Aix Marseilles University, Inst. Fresnel): "Elliptically polarized light for depth screening in biological tissues"
- P27: Vollbrecht, Joachim (University Paderborn): "Optical and electronic properties of unilaterally and bilaterally extended perylene cores"
- P28: Wahle, Markus (University Paderborn): "Group delay tuning in liquid crystal photonic crystal fibers"
- P29: Waqas Waseem, Ahmed (Universitat Politècnica de Catalunya, BarcelonaTech): "Stability enhancement in semiconductor lasers by gain and index modulations"
- P30: Wiebeler, Christian (University Paderborn): "Optical Properties and Nonadiabatic Dynamics of CMTE and other Diarylethenes"

Excursion (Tuesday, 2:00 p. m. – 4:30 p. m.): Open-Air Museum Detmold