



Baden-Württemberg
STIPENDIUM

Final Workshop

of the project “Light-Matter-Interaction in the Context of Core Facilities”, part of the *Baden-Württemberg-STIPENDIUM for university students – BWS plus*, a programme of the Baden-Württemberg Stiftung.

Program

Date: Monday, 10th February 2020

Place: Université de Technologie de Troyes, France

09:00	Anne-Laure BAUDRION, Welcome and introduction
09.15 – 10:45	Session 1 chaired by Anne-Laure Baudrion
09.15	Alina MURAVITSKAYA – Refractive index mediated plasmon hybridization in an array of aluminium nanoparticles
09.45	Alfred J. MEIXNER Kai BRAUN – Probing the electron density shift at the metal-molecule interface induced by a static electric field in TERS
10.15	Lin PAN – Nonlinear optical imaging of two-dimensional WS ₂ flakes
10.45	<i>Coffee Break</i>
11:15 – 12:45	Session 2 chaired by Rodolphe Jaffiol
11.15	Sivashankar KRISHNAMOORTHY – Nanoplasmonic biosensors with structure and surface functionality engineered to molecular dimensions
11.45	Artur MOVSESYAN – Surface enhanced two photon photoluminescence assisted by multi-resonant gold nanocylinder
12.15	Demetrio MACIAS – Metamodeling in Nano-optics: color reproduction as a case study
12.45	<i>Lunch</i>
14:30 – 16:00	Session 3 chaired by Pierre-Michel Adam
14.30	Marc BRECHT – Hypericin: an active natural drug for photodynamic tumor therapy is observable down to the single molecule level
15.00	Monika FLEISCHER – Plasmonic coupling in narrow gaps
15.30	Christophe COUTEAU – On the efficient light-matter interaction using Nanophotonics
16.00	Julien PROUST Jérôme PLAIN – Large-scale and low-cost fabrication of silicon Mie resonators
16.30	<i>Coffee Break & Poster session</i>

Date: Tuesday, 11th February 2020

Place: Université de Technologie de Troyes, France

9:00 – 10:30	Session 4 chaired by Mark Brecht
09.00	Florent LAIBLE / Monika FLEISCHER - Optical and electrical measurements of plasmonic break junctions
09.30	Kai BRAUN – On-chip light emission from vertical optical antenna arrays driven by inelastic electron tunneling
10.00	Jérôme PLAIN – Characterization of the thermal near field using molecular probe
10.30	<i>Coffee Break</i>
11:00 – 12:30	Session 5 chaired by Monika Fleischer
11.00	Tinhinhane AOUDJIT – Nanoscale photoimaging of chiral nanostructures
11.30	Dandan GE – Single hybrid nano-emitters based on plasmonic photopolymerization of gold nanocubes
12.00	Anne-Laure BAUDRION – Photochromic control of plasmonic systems
12.30	<i>Lunch</i>
14.00	Lab tour & discussions
17.00	Social Event
20.00	Gala dinner

Date: Wednesday, 12th February 2020

Place: Université de Technologie de Troyes, France

9:00 – 12:00	Session 6 chaired by Kai Braun
09.00	Sven ZUR OVEN-KROCKHAUS – A modular analysis platform for single molecule localization microscopy
09.30	Rodolphe JAFFIOL – Non-radiative excitation fluorescence nanoscopy
10.00	Quan LIU – Hypericin: single molecule spectroscopy of an active natural drug
10.30	<i>Coffee Break</i>
11.00	Swathi SUDHAKAR – Germanium nanospheres as high precision optical tweezers probes
11.30	Hawraa ATWI – Modification of decay rate near Epsilon-Near-Zero (ENZ) nanoparticles
12.00	<i>Closing remarks, end of the workshop</i>

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WIR STIFTEN ZUKUNFT



Posters

- 01 – Michael MEIXNER – Tunable optical resonances of cloverleaf structures on flexible substrates
- 02 – Thomas SIMON – Al/ZnO hybrid nanostructures for plasmon assisted ultraviolet light emission
- 03 – Miriam SCHOLZ – Investigation of 3D brain tumor cell culture systems with hypericin for subsequent PDT
- 04 – Ermelinda SALVAGGIO – Nanoparticles of nitride-based materials for plasmonics and LMR
- 05 – Mohammad NAVVABPOUR – One-step synthesis of Pd nanostructure for photocatalysis and SERS applications
- 06 – Ashutosh MUKHERJEE – Comparison of spectral resolution of three Raman microscopes
- 07 – Andreas HERRER – Near-field chirality in achiral plasmonic metamolecules
- 08 – Fabrice ASONKENG – Chemical synthesis of self-assembled gold nanotriangles as a potential substrate for surface enhanced Raman spectroscopy (SERS) and biosensor
- 09 – Anke HORNEBER – Investigation of the distance dependence of the Localized Surface Plasmon in Tip-enhanced Raman Spectroscopy (TERS)
- 10 – Florian LAMAZE – Gold nanostructures devices on flexible substrate for strain optical monitoring
- 11 – Hao HU – Comparison and analysis of optical properties of Au and Ag nanogaps
- 12 – Sevcan ATILGAN – Electron energy loss spectroscopy on silver and aluminum nanocones
- 13 – Reegan ARULDOSS – Photochromic control of the photoluminescence of an emitter placed at the apex of a gold nanocone
- 14 – Benjamin TRZECIAK – Fabrication of hybrid structures by means of atomic layer deposition

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The Baden-Württemberg-STIPENDIUM supports the international exchange of students and vocationally qualified people. Since 2001, it has enabled more than 20,000 young people from Baden-Württemberg to gain experience abroad and allowed scholarship holders from other countries to visit Baden-Württemberg. Approximately 1,500 young people receive a Baden-Württemberg-STIPENDIUM each year.

www.bw-stipendium.de

Baden-Württemberg-STIPENDIUM for University Students – BWS plus

With the Baden-Württemberg-STIPENDIUM for University Students – BWS plus, the Baden-Württemberg Stiftung supports innovative joint projects between universities from Baden-Württemberg and their international partners. The programme, which is endowed with approximately 1.2 million euros annually, was announced for the first time in 2011. Since then, more than 70 BWS plus projects have been supported at universities in Baden-Württemberg.

Die Baden-Württemberg Stiftung

The foundation Baden-Württemberg Stiftung is committed to creating a vibrant Baden-Württemberg worth living in. It paves the way for cutting-edge research, diverse educational activities and responsible interactions with our fellow human beings. The Baden-Württemberg Stiftung is one of the major operational foundations in Germany. It is the only one that invests exclusively and non-partisanly in the future of Baden-Württemberg – and thus in the future of its citizens.

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