NANO & QUANTUM OPTICS Seminar

Winter term 2019/2020

Institute of Applied Physics, Abbe Center of Photonics, Friedrich Schiller University Jena

Version: 10.03.2020 – regular updates at www.iap.uni-jena.de/NANO+QUANTUM+seminar

14.10.2019  Monday  
Spectral multiplexing of entangled photon pairs using volume Bragg gratings – research labwork presentation  
*Riza Fazili – Fraunhofer IOF*  
13:00, seminar room 2 ACP

15.10.2019  Tuesday  
The nature of van der Waals epitaxy  
*Shih-Yen Lin – Research Center for Applied Sciences, Academia Sinica, Taiwan*  
13:00, seminar room 1 ACP

22.10.2019  Tuesday  
Holographic and hybrid spectacle lenses – doctoral defense  
*Jannik TRAPP – Carl Zeiss AG*  
17:15, lecture hall 2, physics, Helmholtzweg 5

25.10.2019  Friday  
Spontaneous parametric down conversion in GaAs nano antennas – master defense  
*Maximilian WEISSFLOG*  
12:00, seminar room 2 ACP  
Investigation of optical coupling phenomena in silicon metasurfaces – master defense  
*Wenjia ZHOU*  
15:30, seminar room 2 ACP

07.11.2019  Thursday  
Design criteria of stacked plasmonic metasurfaces for non-contact measurements of bilirubin – internship presentation  
*Annisa Judya SUGIARTI*  
Numerical simulation of GaP metasurfaces – internship presentation  
*Zhishuai LIU*  
14:00, auditorium ACP

12.11.2019  Tuesday  
Analytical and numerical research in quantum ghost diffraction and imaging – internship presentation  
*Margareta Vania STEPHANIE*  
14:00, auditorium ACP

13.11.2019  Wednesday  
Graphene nonlinear optics  
*Giancarlo SOAVI – Institute of Solid State Physics, Jena*  
14:00, Carl Zeiss seminar room, Fraunhofer IOF

15.11.2019  Friday  
Design and characterization of prism pulse compressor – internship presentation  
*Ahmed MOHAMMED*  
15:00, auditorium ACP

19.11.2019  Tuesday  
Nanophotonics for surface-enhanced light/matter interactions  
*Stefan MAIER - Ludwig-Maximilians-Universität München*  
10:00, lecture hall Abbe Zentrum Beutenberg

26.11.2019  Tuesday  
Characterization of the optical properties of mono layered MoS₂ in optical resonators – Bachelor defense  
*Ralf HÜHN*  
16:00, meeting room 306 ACP
28.11.2019 Thursday
Electromagnetic behavior of small high refractive index dielectric particles and metallic nanohole arrays

Angela BARREDA – University of Cantabria, Spain
14:00, auditorium ACP

03.12.2019 Tuesday
Large scale tunneling junctions for electrically driven plasmonics – doctoral defense

André DATHE
17:15, lecture hall 2, physics, Helmholtzweg 5

05.12.2019 Thursday
Design and fabrication of plasmonic nanoarrays for broadband solar absorption

Jianshu GAO – Technical University Ilmenau
14:00, auditorium ACP

12.12.2019 Thursday
Tailoring spatial emission patterns of magnetic dipole transitions using resonant dielectric nanostructures – internship presentation

Ayesheh BASHIRI

Nonlinear optical effects in isolated oligomers of Mie-resonant nanoparticles excited by Gaussian and vector beams

Maria KROYCHUK – Lomonossow - Moscow State University
14:00, auditorium ACP

17.12.2019 Tuesday
Reflective metasurfaces for 3D effects operating in visible spectral range and incoherent illumination. + Few words on the optically controlled high power microwave systems

Alexander MINOVICH – King’s College London, UK and Eureka Aerospace Inc, Pasadena, USA
14:00, auditorium ACP

19.12.2019 Thursday
Realization of an automated setup for scanning SHG microscopy – internship presentation

Sebastian RITTER

Valley routing of emission using plasmonic nanoantennas

Mostafa ABASIFARD

Towards polariton condensation in atomically thin materials

Matthias WURDACK – Australian National University, Canberra
14:00, auditorium ACP

23.01.2020 Thursday
New characterization methods with PEEM

Matthias FALKNER
14:00, auditorium ACP

31.01.2020 Friday
Superfocusing in a gold wedge

Bayarjargal NARANTSATSRALT
14:00, auditorium ACP

03.02.2020 Monday
Design of silicon photonic crystal waveguides for counterpropagating photon-pair generation – internship presentation

Yu ZHANG
10:30, seminar room 1 ACP

19.02.2020 Wednesday
Design of silicon photonic integrated optical filter based on ring resonators for noise suppression in high-speed data center interconnect applications – Master defense

Saif ALNAIRAT
14:00, auditorium ACP
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Speaker/Title</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.02.2020</td>
<td>Factorizable photon-pair generation in microstructured liquid-core fibers – Master defense</td>
<td>Zhouping LYU</td>
<td>14:00</td>
<td>seminar room 1 ACP</td>
</tr>
<tr>
<td>03.03.2020</td>
<td>Tuning of all-dielectric metasurface resonances by electrical stimulus and temperature tuning – internship presentation</td>
<td>Cristina Josefina Amaya MENDEZ</td>
<td>14:00</td>
<td>auditorium ACP</td>
</tr>
<tr>
<td>12.03.2020</td>
<td>Laser stabilization on a cryogenic optical fiber</td>
<td>Daniel REPP</td>
<td>14:30</td>
<td>auditorium ACP</td>
</tr>
<tr>
<td>18.03.2020</td>
<td>Beyond metals and semiconductors: quadratic materials for integrated photonics</td>
<td>Rachel GRANGE – ETH Zurich</td>
<td>10:00</td>
<td>auditorium ACP</td>
</tr>
<tr>
<td>19.03.2020</td>
<td>Waveguide structures in 2D-multilayer systems – Master defense</td>
<td>Ming LEE</td>
<td>14:00</td>
<td>auditorium ACP</td>
</tr>
</tbody>
</table>

The seminar rooms and auditorium of the Abbe Center of Photonics are located in the foyer area in the ground floor of the building, Campus Beutenberg, Albert-Einstein-Straße 6, 07745 Jena. The meeting rooms are located in the upper floors of the Abbe Center of Photonics according to the first digit of their number. External guests should take the public staircase from the foyer area and ring the bell at the individual doors to the meeting areas or call the secretary’s office from the phones at the building’s entrances (dial 47562).

The Carl Zeiss seminar room of the Fraunhofer Institute Jena is located at Campus Beutenberg, Albert-Einstein-Straße 7, 07745 Jena. The seminar room of the Institute of Applied Physics is located at in the yellow part of the institute building in the first floor, Campus Beutenberg, Albert-Einstein-Straße 15, 07745 Jena.

For further information, please contact the organizers of the seminar: Falk Eilenberger (falk.eilenberger@uni-jena.de, +49 3641 947990), Thomas Pertsch (thomas.pertsch@uni-jena.de, +49 3641 947560), Frank Setzpfandt (f.setzpfandt@uni-jena.de, +49 3641 947566), or Isabelle Staude (isabelle.staude@uni-jena.de, +49 3641 947566).