

Program for EMN Meeting on Terahertz & Collaborative Conference on Nonlinear Optics 2018

14:00-17:00

Monday April 16
Onsite registration & Sign up

Tuesday April 17

Session: Terahertz I Chair: Pengda Hong

07:55-08:20

A01: Development of Compact THz remote spectral sensitive camera

Vladimir Antonov
Royal Holloway University of London,
UK

08:20-08:45

A02: Zero resistance states induced by terahertz radiation in high mobility semiconductor heterostructures

Jesus Iñarrea
Universidad Carlos III, Spain

08:45-09:10

A03: Key Technologies of Terahertz InP HBT Integrated Circuit

Yong Zhang
University of Electronic Science and
Technology of China, China

09:10-09:35

A04: An Integrated-Circuit Approach to Terahertz Nearfield Imaging

Ullrich R. Pfeiffer
University of Wuppertal, Germany

09:35-10:00

A05: THz generation based on parametric conversion and applications: past, present and future

Pengda Hong
Lehigh University, USA

10:00-10:25

A06: Nanoelectrode Based Terahertz Devices

Shihab Al-Daffaie
Technical University Darmstadt,
Germany

10:25-10:40

Session Break

Session: Nonlinear Optics Chair: Martin Weitz

10:40-11:05

A07: Anderson Transitions in Metamaterials

Kenneth M. Golden
University of Utah, USA

11:05-11:30

A08: Synthetic Optical Properties of Nonlinear Soft-Matter

Zhigang Chen
Nankai University, China

11:30-11:55

A09: Free carrier front induced photonic transitions in slow light waveguides

Mahmoud Abdel Aziz Gaafar
Hamburg University of Technology,
Germany

11:55-12:20

A10: Ultra-high-linearity 100 GHz-swept optical source realized by injection-locking technique and

Xinyu Fan
Shanghai Jiao Tong University, China

	cascaded FWM process	
12:20	Lunch Break	

Tuesday April 17		
Session: Photon Bose-Einstein condensation		Chair: Baruch Fischer
13:45 -14:10	A11: Photon Thermalization in Standard Erbium-Doped Fibers and Lasers	Baruch Fischer Israel Institute of Technology, Israel
14:10 -14:35	A12: Calorimetry of a Bose-Einstein-condensed photon gas	Martin Weitz University of Bonn, Germany
14:35-15:00	A13: Evolutionary complexity and the imitation game of nature: from black body photon condensation to network nanomaterials and their applications	Andrea Fratalocchi King Abdullah University of Science and Technology, UAE
15:00-15:25	A14: TBD	Jan Klaers University of Twente, The Netherlands
15:25-15:40	Session Break	
Session: Terahertz II		Chair: Yong Zhang
15:40-16:05	A15: Short THz pulse generation from a dispersion compensated QCL laser	Jérôme Tignon Laboratoire Pierre Aigrain, France
16:05-16:30	A16: Development of high efficient THz light sources and its practical application for the non-invasive structural defects of infrastructures	Yutaka Oyama Tohoku University, Japan
16:30-16:55	A17: THz Chirped Pulse Dual Frequency Comb Spectroscopy	David Plusquellic National Institute of Standards and Technology, USA
16:55-17:20	A18: Monocycle terahertz vortex generation	Katsuhiko MIYAMOTO Chiba University, Japan
17:50	Dinner Social	

Wednesday April 18

Session: Terahertz III Chair: Shihab Al-Daffaie

08:10-08:35	A20: Oxide nonlinear crystals: optical properties and potential for THz generation	Mira Naftaly National Physical Laboratory, UK
08:35-09:00	A21: Study on the Terahertz Quantum-Well Photodetector	Yueheng Zhang Shanghai Jiao Tong University, China
09:00-09:25	A22: Anharmonicity and Hydrogen-Bonded Network Observed by Terahertz Spectroscopy	Masae Takahashi Tohoku University, Japan
09:25-09:50	A23: Terahertz generation in two-dimensional semiconductor systems	Serhii Siaber Imperial College London, UK
09:50-10:15	A24: Spherical graphitic carbon nitride nano-composite with Ag ₂ ZrO ₃ for photodegradation of herbicide MTSM	Tahir Muhmood Nanjing University of Science & Technology, China

10:15-10:30

Session Break

Session: Terahertz IV Chair: Mira Naftaly

10:30-10:55	A25: Giant multiphoton absorption for THz resonances in silicon hydrogenic donors	Marcel van Loon University of Surrey, UK
10:55-11:20	A26: Coherent Terahertz Wave Emission from Stacks of Intrinsic Josephson Junctions of High-Temperature Superconductors: Fundamentals and Applications	Manabu Tsujimoto University of Tsukuba, Japan
11:20-11:45	A27: THz-Technology for applications in the polymer market with main focus on foams	Marcel Werner SKZ - KFE gGmbH, Germany
11:45-12:10	A28: The noise and modulation behaviors of Terahertz Quantum Cascade Lasers with Optical Injections	Weidong Chu Institute of Applied Physics and Computational Mathematics, China

12:10

Lunch Break

Wednesday April 18

Session: Terahertz V Chair: Hiroshi Ito		
14:00-14:25	A29: Terahertz scattering based scanning near field microscopy (THz s-SNOM) based on self-mixing in quantum cascade lasers	H.E. Beere University of Cambridge, UK
14:25-14:50	A30: Terahertz devices based on liquid crystal	Makoto Nakajima Osaka University, Japan
14:50 -15:15	A31: Nonlinear terahertz electrodynamics of graphene	S. A. Mikhailov University of Augsburg, Germany
15:15-15:40	A32: Absolute-frequency, high-resolution terahertz dual-comb spectrometry based on Electro-Optic Optical Frequency Combs	Pablo Acedo Universidad Carlos III de Madrid, Spain
15:40-16:05	A33: Experimental characterization of a cavity based terahertz signal generator with multi-layer graphene	Samuel Ver Hoeye University of Oviedo, Spain
16:05-16:25	Poster Session	
Session: Terahertz VI Chair: H.E. Beere		
16:25-16:50	A34: Low-noise terahertz-wave detection using Fermi-level managed barrier diode for imaging applications	Hiroshi Ito Kitasato University, Japan
16:50-17:15	A35: Applications of nonlinear surface THz generation	Juan Sebastian Totero Gongora University of Sussex, UK
17:15-17:40	A36: Forward and backward THz-wave parametric generation with high peak-output	Hiroaki Minamide RIKEN Center for Advanced Photonics, Japan
17:40-18:05	A37: DNA Characterization with THz Surface Plasmon: Enabling a Novel Approach	Daniel Shreiber US Army Research Lab, USA
18:10	Dinner Social	

Poster Session Wednesday April 18 16:05-16:25
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P01	Optimization of the GaAs based HIWIP for the THz region below Reststrahlen band	Peng Bai Shanghai Jiao Tong University, China
P02	Computational Study for Reaction Routes of CO ₂ on Heterojunction Cu-Fe Oxide Materials	Sun Hee Yoon Texas A&M University at Qatar, Qatar
Thursday, April 19		
One-Day Excursion: Nature, Culture, and Collaboration		