

## 6th EOS Topical Meeting on Terahertz Science & Technology (TST 2018)

Hotel Radisson BLU, Berlin, Germany, 6 - 9 May, 2018

**Sunday, May 6:** registration ~18 onwards & welcome reception ~19:00 (more info will follow)

**Monday, May 7**

8:00 Registration opens				
9:00 Introductory remarks				
9:10 – 10:10 Keynote - T. Elsaesser: Nonlinear terahertz spectroscopy – basic concepts and applications in solid state physics				
10:10 – 10:30 Coffee break				
10:30 – 12:40 Session 1: THz interaction with matter				
No.	Presenting author	Title	Time	Status
102	S. Komiyama	Near field imaging of THz fluctuation of matters	30 min	invited
115	S. Gebert	Infrared/terahertz photogalvanic spectroscopy of BiSbTe based three dimensional topological insulators	20 min	oral
153	S. Li	THz-induced electron emission from a gold surface	20 min	oral
128	K. Krewer	Accessing the fundamental timescale of conduction in metals and at their interfaces	20 min	oral
122	G. Scalari	THz nano-gap hybrid LC metasurface ultra-strongly coupled to less than 100 electrons	20 min	oral
164	A.Fallahi	Electron injectors, accelerators and manipulators using segmented terahertz devices	20 min	oral
12:40 – 14:15 Lunch break				
14:15 – 16:05 Session 2: Short pulse THz sources				
	J. Hebling	Past and future of tilted-pulse-front-pumped high intensity THz pulse sources	30 min	invited
109	L. Berge	THz pulses with mJ energy produced by ultrafast CO <sub>2</sub> lasers in air	20 min	oral
131	P. Nugraha	Demonstration of a tilted-pulse-front pumped plane-parallel slab terahertz source	20 min	oral
176	F. Wang	Short THz pulse generation from a dispersion compensated modelocked fiber laser	20 min	oral
137	A.Shugurov	Nonellipsometric electro-optic detection of terahertz pulses in GaAs	20 min	oral
16:05 – 16:30 Coffee break				
16:30 – 18:00 Session 3: THz imaging				
	E. Hendry	Single pixel, near field THz imaging	30 min	invited
133	B. Globisch	THz near-field imaging with photoconductive microprobes driven by a fiber-coupled time-domain spectroscopy system	20 min	oral
126	A.Reich	THz near-field imaging and spectroscopy with nanoscale resolution	20 min	oral
130	F. Kuschewski	Nonospectroscopy in the low THz range with <50nm resolution	20 min	oral

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Tuesday, May 8

<b>8:30 – 9:15 Master Class - H. Grahm: THz quantum-cascade lasers</b>				
<b>9:15 – 10:05 Session 4: Quantum-cascade lasers I</b>				
No.	Presenting author	Title	Time	Status
	J. Freeman	Quasi-optical injection locking of a THz QCL to telecommunications wavelength frequency comb	30 min	invited
158	C. Derntl	Gain recovery dynamics in broadband THz quantum cascade lasers	20 min	oral
<b>10:05 – 10:30 Coffee break</b>				
<b>10:30 – 12:00 Session 5: THz interaction with matter II</b>				
161	T. Kampfrath	Probing and controlling spin dynamics by terahertz waves	30 min	invited
149	M. Hibberd	Magnetic-field tailoring of the terahertz polarization emitted from a spintronic source	20 min	oral
101	Z. Zhao	Terahertz slow light at plasmon-induced transparency windows in symmetry broken dimer and trimer molecules	20 min	oral
113	M. Otteneder	Giant terahertz photoconductance of a tunneling point contact	20 min	oral
<b>12:00 – 13:30 Lunch break</b>				
<b>13:30 – 14:40 Session 6: Passive components</b>				
	R. Singh	THz metamaterials	30 min	Invited
148	H. Alaboz	A laser cut THz metal mesh bandpass filter with high transmission	20 min	oral
168	E. Abraham	Terahertz adaptive optics with a deformable mirror	20 min	oral
<b>14:40 – 15:15 Coffee break</b>				
<b>15:15 -16:00 Master Class - P. Jepsen: Applications of THz time-of-flight imaging</b>				
<b>16:00 -16:50 Session 7: Continuous wave sources</b>				
	J Stake	THz generation with diode frequency multipliers	30 min	invited
156	S. Preu	Time domain system employing ErAs:In(Al)GaAs photoconductors at 1550 nm with a dynamic range of 33 dB at 4.3 THz	20 min	oral
<b>16:50 -18:30 Poster Session</b>				
<b>20:00 Conference Dinner – Restaurant Nolle</b>				

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Wednesday May 9

<b>8:30 – 9:15 Master class - B. Murdin THz multi-photon processes in silicon</b>				
<b>9:15 – 10:25 Session 8: Quantum cascade lasers II</b>				
No.	Presenting author	Title	Time	Status
	<b>S. Morozov</b>	<b>HgCdTe-based heterostructures for THz emitters</b>	<b>30 min</b>	<b>Invited</b>
124	A. Forrer	Octave-spaced, monolithic dual-frequency comb quantum cascade laser source	20 min	oral
111	B. Röben	Terahertz quantum-cascade lasers as high-power sources for Fourier transform far-infrared spectroscopy	20 min	oral
<b>10:25 – 11:00 Coffee break</b>				
<b>11:00 – 12:50 Session 9: THz spectroscopy</b>				
<b>160</b>	<b>M. Wienold</b>	<b>Nonlinear molecular spectroscopy with terahertz quantum-cascade lasers</b>	<b>30 min</b>	<b>invited</b>
173	H. Hempel	Screening energy materials by terahertz spectroscopy	20 min	oral
121	J. Keller	Critical mode softening in THz ultra-strong coupling beyond the Hopfield model	20 min	oral
175	S. Dhillon	Monolithic echo-less photoconductive switches for high-resolution terahertz time-domain spectroscopy	20 min	oral
104	I.Benea-Chelmus	Few photons field correlation measurements inside a Fabry-Perot cavity	20 min	oral
<b>12:50 – 13:00 Closing remarks</b>				
<b>13:00 -14:30 Lunch break</b>				
<b>14:30 Lab tours</b>				

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No.	Presenting/(submitting) author	Title
103	Ignas Grigelionis	THz spectroscopy of shallow impurities electroluminescence in AlGaIn/GaN structures
106	Steiger, Andreas	Artifact characterization for accurate TDS measurements
105	Ileana-Cristina, Benea-Chelmus	Three-dimensional phase modulator at telecom wavelength acting as a Terahertz detector with an electro-optic bandwidth of 1.25 Terahertz
107	Staats, Naja-Anissa	Monitoring the consolidation of wooden substrates and painting layers in art restoration
108	Wang, Zhe	Magnetic field dependence of antiferromagnetic resonance in NiO
112	Kamenskyi, Dmytro	Non-linear THz spectroscopy of Ga doped Ge in magnetic fields
114	Candussio, Susanne	THz Spectroscopy of Surface States in 3D Topological Insulators based on Strained High Mobility HgTe Films
116	Limbacher, Benedikt	Intersubband Polaritons in Triple Barrier Resonant Tunneling Diodes
117	Kucharik, Jiri	Terahertz conductivity and coupling between geometrical and plasmonic resonances in nanostructures
118	Rothbart, Nick	Two-Channel Gas Spectroscopy Setup around 245 GHz in SiGe BiCMOS Technology
119	Keller, Janine	Complementary THz split ring resonators: coupled to surface plasmon polaritons and superradiantly limited linewidth on Si-membranes
120	(Pashkin, Alexei)	Plasmonic response of III-V semiconductor core/shell nanowires studied by pump-probe terahertz spectroscopy
123	Pavlov, Sergey G.	Raman Scattering of Light at THz frequencies in n-Si
125	Singh, Abhishek	Broadband THz emission from Ge photoconductive antenna
127	Wenclawiak, Moritz	Strong coupling with planar meta-atoms – a matter of volume?
134	Tibai, Zoltan	Electron acceleration by intense THz pulses
135	(Gensch, Michael)	THz control of Matter utilizing 4th Generation Light sources: Opportunities at the superradiant THz facility TELBE
136	But, Dmytro	Millimeter range detector based on Graphene Ballistic Rectifiers
138	Augustin, Sven	Going beyond the wavelength limit in the far-field with terahertz single detector pixel computational imaging
139	Sai, Pavlo	Towards electrically driven sub-THz GaN/AlGaIn based detector
140	Deinert, Jan-Christoph	Towards directly probing THz-driven transient electronic states with time-resolved ARPES
141	Choporova, Yulia	Diffraction optical elements for laser mode transformation and focusing in determined areas and volumes

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142	Kainz, Martin Alexander	Conduction band offset engineering for high temperature THz quantum cascade lasers
143	Kohlhaas, Robert B	Photoconductive terahertz receivers enabling 105 dB peak dynamic range and more than 6 THz bandwidth
144	Bristow, Alan D	Terahertz Detected Hot-Carrier Dynamics in Type-II Quantum Wells
145	Krizsán, Gergő	Efficient semiconductor source of multicycle terahertz pulses
146	Tóth, György	Efficient source of intensity-modulated pulses for tunable multicycle terahertz pulse generation
147	Ornik, Jan	High quality terahertz wave plate made from glass
150	Schoenhuber, Sebasitan	Time Domain Spectroscopy on Periodic and Random Structures
151	Maissen, Curdin Martin	Phase resolved Terahertz near-field imaging using synthetic optical holography
152	Klopf, J. Michael	FELBE, The THz/Infrared FEL User Facility for Ultrafast, Nanoscale, and High Field Studies
154	Fülöp, Jozsef Andras	THz beamlines at ELI-ALPS
155	Ostatnický, Tomas	THz conductivity spectra and plasmon resonances in semiconductor nanocrystals
157	Kužel, Petr	Non-BCS Response of Photoexcited Superconducting NbN Films
159	Alam, Tasmim	Molecular spectroscopy by illumination-induced frequency tuning of a terahertz quantum-cascade laser
162	Morohashi, Isao	THz imaging system using MEMS bolometer and THz-QCL
163	Giliberti, Valeria	Knife-edge scan for super-resolved terahertz microscopy
165	Paradis, Clément	Broadband THz generation driven by a thin-disk laser oscillator
166	Němec, Hynek	Insulator-metal transition in PrYCaCoO <sub>3</sub> thin films studied by terahertz spectroscopy
167	Khabibullin, Rustam	The investigation of temperature degradation in THz quantum cascade lasers based on three and four-well active module
169	Pushkarev, Vladimir	Ultrafast conductivity of Si nanocrystals superlattices in the terahertz and mid-infrared range
170	Kasalynas, Irmantas	Focusing gain and optical losses of silicon diffractive optics for 4.7 THz frequency
171	Walczakowski, Michal J	Tests of the data transmission in THz range
172	Woldegeorgis, Abel	60 MV/m longitudinal terahertz fields from relativistic laser-plasma terahertz source
174	Kadlec, Christelle	Electromagnon in Y-type hexaferrite BaSrCoZnFe <sub>11</sub> AlO <sub>22</sub>
178	Molnár, László	A possible model to investigate the qualitative and quantitative effects of THz radiation on animal tissues: tail regeneration of the earthworm Eisenia andrei (Annelida, Clitellata)
181	Beigang, René	Efficient Terahertz Generation Using Fe/Pt Spintronic Emitters Pumped at Different Wavelengths