

## September 17<sup>th</sup> - Monday

16:00-19:00	<b>Registration</b> CBF "Nowy Świat" Finance-Banking Center, ul. Nowy Świat 6/12
19:00-21:00	<b>Welcome meeting</b> CBF "Nowy Świat" Finance-Banking Center, ul. Nowy Świat 6/12

## September 18<sup>th</sup> - Tuesday

9:00-9:45	<b>Opening session</b>	
	<b>Welcome from Chairman and Organizers</b> Wojciech Knap (CNRS Montpellier, France & IHPP PAS Unipress, Poland) Jerzy Jusakowski (Faculty of Physics, University of Warsaw, Poland) Taichi Otsuji (Tohoku Univ., Japan) Jacek Przybytek (IHPP PAS Unipress, Poland)	
	<b>Welcome from LIA TERAMIR</b> Frédéric Teppe (CNRS Montpellier, France)	
	<b>Welcome from Polish Academy of Sciences and Institute of High Pressure Physics "Unipress", Polish Academy of Sciences</b> Paweł Kulesza Izabella Grzegory	
	<b>Terahertz projects founded by Foundation for Polish Science</b> Kinga Stomińska Maria Pawłowska Wojciech Knap (CENTERA and TEAM projects)	
9:45-10:00	<b>Coffee break</b>	
10:00-11:45	<b>Session Tue-1</b>	<b>THz Spectroscopy</b>
10:00-10:30	Tue-1-1 <b>Kawase</b> (invited)	<b>Multi wavelength THz source for one-pulse spectroscopy</b>
10:30-11:00	Tue-1-2 <b>Krotkus</b> (invited)	<b>THz excitation spectroscopy - a method for investigating semiconductor band structure</b>
11:00-11:30	Tue-1-3 <b>Chernomyrdin</b> (invited)	<b>Terahertz pulsed spectroscopy and continuous-wave imaging of soft biological tissues</b>
11:30-11:45	Tue-1-4 <b>Telenkov</b> (contributed)	<b>"Forbidden" intersubband optical transitions in quantum well structures in a tilted magnetic field</b>
11:45-12:15	<b>Coffee break</b>	
12:15-13:45	<b>Session Tue-2</b>	<b>Dirac Matter and Graphene Heterostructures</b>
12:15-12:45	Tue-2-1 <b>Ganichev</b> (invited)	<b>THz edge photocurrents in graphene in the quantum Hall regime</b>
12:45-13:15	Tue-2-2 <b>Krishnopenko</b> (invited)	<b>Massless Dirac fermions in III-V semiconductor quantum wells</b>
13:15-13:45	Tue-2-3 <b>Tepe</b> (invited)	<b>Temperature-dependent Landau level spectroscopy of HgCdTe and InAs/GaSb based topological materials</b>
13:45-15:00	<b>Lunch</b>	
15:00-17:00	<b>Session Tue-3</b>	<b>Industrial Session</b>
15:00-15:30	Tue-3-1 <b>Hesler</b> (invited)	<b>Solid State THz Transceivers for Test and Measurement Applications</b>
15:30-16:00	Tue-3-2 <b>Deninger</b> (invited)	<b>Terahertz on Speed: Fast TD-THz Techniques and their Applications</b>
16:00-16:30	Tue-3-3 <b>Archier</b> (invited)	<b>Terahertz camera for automotive industry</b>
16:30-17:00	Tue-3-4 <b>Sypek</b> (invited)	<b>THz diffractive optics</b>
17:00-17:15	<b>Coffee break</b>	
17:15-19:00	<b>Session Tue-4</b>	<b>Layered and narrow gap materials I</b>
17:15-17:45	Tue-4-1 <b>Potemski</b> (invited)	<b>Excitons in mono- and multi-layers of transition metal dichalcogenides</b>
17:45-18:15	Tue-4-2 <b>Khokhlov</b> (invited)	<b>Terahertz photoconductivity in Hg<sub>1-x</sub>Cd<sub>x</sub>Te-based heterostructures in magnetic field</b>
18:15-18:45	Tue-4-3 <b>Ryzhii</b> (invited)	<b>Concepts of Infrared and Terahertz Photodetectors Based on Vertical Graphene and HgTe-CdHgTe Heterostructures</b>
18:45-19:00	Tue-4-4 <b>Yahniuk</b> (contributed)	<b>Topological Phases of HgTe Quantum Wells for QHE resistance standard applications</b>

## September 19<sup>th</sup> - Wednesday

9:00-10:45	<b>Session Wed-1</b>	<b>IR &amp; THz Devices</b>
9:00-9:30	Wed-1-1 <b>Rogalski</b> (invited)	Antimonide-based infrared detectors - A new perspective
9:30-10:00	Wed-1-2 <b>Qin</b> (invited)	Terahertz Detectors based on Gallium Nitride HEMTs: from direct detection to heterodyne detection
10:00-10:30	Wed-1-3 <b>Feiginov</b> (invited)	THz sources small and simple: resonant-tunnelling-diode oscillators
10:30-10:45	Wed-1-4 <b>Dobroui</b> (contributed)	Absolute and accurate distance measurement using a resonant-tunneling diode terahertz oscillator
10:45-11:15	<b>Coffee break</b>	
11:15-12:45	<b>Session Wed-2</b>	<b>THz communications and sensing</b>
11:15-11:45	Wed-2-1 <b>Nagatsuma</b> (invited)	Exploring 600-GHz band for communications and sensing
11:45-12:15	Wed-2-2 <b>Satou</b> (invited)	Carrier Frequency Down-Conversion from Optical to MMW/THz Data Signal Using InGaAs-HEMT
12:15-12:45	Wed-2-3 <b>Vaks</b> (invited)	Application of quantum cascade lasers and superlattice devices for high resolution THz spectroscopy
12:45-14:00	<b>Lunch</b>	
14:00-15:30	<b>Session Wed-3</b>	<b>THz Electronic Detectors and Sources</b>
14:00-14:30	Wed-3-1 <b>Aizin</b> (invited)	Slow Plasma Waves for THz Electronic Detectors and Sources
14:30-15:00	Wed-3-2 <b>Vainshtein</b> (invited)	Interferometrically enhanced contrast of sub-terahertz picosecond-domain histology, utilizing a miniature collapsing-field-domain source
15:00-15:30	Wed-3-3 <b>Tredicucci</b> (invited)	Miniaturizing terahertz quantum cascade lasers
15:30-19:30	<b>Visit of Warsaw / Excursion / Free Time</b>	
19:30-22:00	<b>Banquet at Restaurant "Kameralna" (Kopernika-Street 3)</b>	

## September 20<sup>th</sup> - Thursday

<b>9:00-10:45 Session Thu-1 THz Photonics &amp; Metamaterials</b>		
9:00-9:30	Thu-1-1 <b>Vasanelli</b> (invited)	<b>Cooperative phenomena and ultra-strong light-matter coupling for tailored thermal emission</b>
9:30-10:00	Thu-1-2 <b>Valusis</b> (invited)	<b>Silicon diffractive optics for THz beam manipulation and applications for THz imaging</b>
10:00-10:30	Thu-1-3 <b>Dolganova</b> (invited)	<b>Terahertz Scattering in Quasi-Ordered Structures: Impact on Imaging Applications</b>
10:30-10:45	Thu-1-4 <b>Hartnagel</b> (contributed)	<b>Terahertz Quantum Cascade Lasers based on Non-polar m-plane ZnMgO/ZnO</b>
<b>10:45-11:15 Coffee break</b>		
<b>11:15-12:45 Session Thu-2 THz Photodetectors &amp; Bolometers I</b>		
11:15-11:45	Thu-2-1 <b>Preu</b> (invited)	<b>20 ps temporal resolution of THz pulses recorded with (Al)GaAs high electron mobility transistors</b>
11:45-12:15	Thu-2-2 <b>Gol'tsman</b> (invited)	<b>State of the art of THz hot-electrons bolometers</b>
12:15-12:45	Thu-2-3 <b>Otani</b> (invited)	<b>Modification of intermolecular structures of soft materials by intense THz radiation</b>
<b>12:45-14:45 Lunch</b>		
<b>14:45-16:15 Session Thu-3 Dirac Matter II</b>		
14:45-15:15	Thu-3-1 <b>S. Mikhailov</b> (invited)	<b>Graphene for Emission of Terahertz Radiation</b>
15:15-15:45	Thu-3-2 <b>Orlita</b> (invited)	<b>Magneto-optics of electrons in conical bands</b>
15:45-16:15	Thu-3-3 <b>Kachorovskii</b> (invited)	<b>Tunneling Aharonov-Bohm interferometer on helical edge states</b>
<b>16:15-16:45 Coffee break</b>		
<b>16:45-18:30 Session Thu-4 Layered and narrow gap materials II</b>		
16:45-17:15	Thu-4-1 <b>Gavrilenko</b> (invited)	<b>THz stimulated emission from HgCdTe QWs</b>
17:15-17:45	Thu-4-2 <b>N. Mikhailov</b> (invited)	<b>MCT heterostructures grown by MBE for IR and THz detectors</b>
17:45-18:15	Thu-4-3 <b>El Fatimy</b> (invited)	<b>Ultrasensitive and broadband graphene bolometer</b>
18:15-18:30	Thu-4-4 <b>Sai</b> (contributed)	<b>EdgeFET Based on AlGaIn/GaN with Two Lateral Schottky Barrier Gates Towards Resonant Terahertz Detection</b>

## September 21<sup>st</sup> - Friday

9:00-10:45	<b>Session Fri-1</b>	<b>Graphene and Carbon Nanotubes for THz Devices</b>
9:00-9:30	Fri-1-1 <b>Kawano</b> (invited)	Carbon nanotube omnidirectional terahertz cameras
9:30-10:00	Fri-1-2 <b>Fedorov</b> (invited)	THz investigations of carbon structures
10:00-10:30	Fri-1-3 <b>Svintsov</b> (invited)	Plasmon-assisted resonant detection of terahertz radiation in graphene transistors
10:30-10:45	Fri-1-4 <b>Dubinov</b> (contributed)	Terahertz plasmon-emitting graphene-channel transistor
10:45-11:15	<b>Coffee break</b>	
11:15-13:00	<b>Session Fri-2</b>	<b>THz Plasmonic Devices</b>
11:15-11:45	Fri-2-1 <b>Delgado Notario</b> (invited)	Terahertz detection by bilayer graphene multifinger field effect transistor
11:45-12:15	Fri-2-2 <b>Golub</b> (invited)	Ratchet effects in structures with lateral superlattices
12:15-12:45	Fri-2-3 <b>Otsuji</b> (invited)	Emission and amplification of terahertz radiation using Dirac Fermions and plasmons in graphene
12:45-13:00	Fri-2-4 <b>Suzuki</b> (contributed)	2D Diffraction Grating for Controlling Polarization Characteristics of Grating-Gate Plasmonic THz Detector
13:00-15:00	<b>Lunch</b>	
15:00-17:00	<b>Session Fri-3</b>	<b>THz Photodetectors &amp; Bolometers II</b>
15:00-15:30	Fri-3-1 <b>Shapoval</b> (invited)	Periphery optical matching for the sensitive element of THz detector
15:30-16:00	Fri-3-2 <b>Ponomarev</b> (invited)	Terahertz photoconductive emitters with plasmonic gratings: modeling and experiment
16:00-16:30	Fri-3-3 <b>Kopyt</b> (invited)	Measurements of the responsivity of FET-based detectors of sub-THz radiation
16:30-17:00	Fri-3-4 <b>Zagrajek</b> (invited)	Terahertz activity in Warsaw: detectors, spectroscopy, imaging
17:00-17:15	<b>Closing Session</b>	