time	Hall A				Hall B				Hall C				Hall D			
Monday, 22.10.2018																
9:00	**Registration starts**															
14:00-14:30	**OPENING (HALL A)**															
	Plenary session 1															
14:30-16:00	P1. **Nikolay A. Vinokurov** *Generating High Power Terahertz and Far Infrared Electromagnetic Radiation with Relativistic Electrons* (40 min) P2. **Gun-Sik Park** *Investigations of hydration dynamics in biomedical systems using terahertz waves* (40 min)															
16:00-16:30	**Coffe break**															
16:30-18:00	**S1.1 Electronic sources of THz & MW radiation, synchrotron radiation, free-electron lasers**				**S2.1 Optoelectronic & solid-state sources of THz radiation**				**S3.1 Generation of THz radiation by intense laser pulses**				**S10.1 Medical and biological applications of THz radiation**			
	Vladimir	**Bratman**	Prospective THz gyrotrons for high-field magneto-resonance spectroscopy	Oral	Vladimir	**Gavrilenko**	THz stimulated emission at interband transitions in HgTe/CdHgTe quantum wells	Invited	Tsuneyuki	**Ozaki**	THz nonlinear optics in the sub-cycle regime	Keynote	Vladimir	**Vaks**	High resolution terahertz spectroscopy for medical, biological and agricultural applications	Invited
	Yoshinori	**Tatematsu**	Recent progress in development and application of sub-THz gyrotrons in University of Fukui	Invited	Yenchieh	**Huang**	Off-axis THz parametric oscillator	Oral	Dongwen	**Zhang**	Coherent multichannel dynamics of aligned molecules resolved by two dimensional high-harmonic and terahertz spectroscopy (2D-HATS)	Invited	Kirill	**Zaytsev**	Intraoperative diagnosis of malignant brain gliomas using terahertz pulsed spectroscopy and optical coherence tomography	Invited
	Tobias	**Ruess**	Towards Fully Automated Systems for the Generation of Very High Order Modes in Oversized Waveguides	Oral	Nickolay	**Kinev**	Wideband Josephson THz flux-flow oscillator integrated with the slot lens antenna and the harmonic mixer	Oral	Olga	**Kosareva**	Terahertz generation from single and multiple filaments in air	Invited	Yury	**Kistenev**	Applications of THz laser spectroscopy and machine learning for medical diagnostics	Invited
	Olgierd	**Dumbrajs**	Possible gyrotron operation in the 'no start current' zone	Oral	Alexander	**Klushin**	Evidence of synchronization of large Josephson-junction arrays by traveling electromagnetic waves	Oral	Stefan	**Skupin**	Resonant Effects in Terahertz Generation with Laser-Induced Gas Plasmas	Invited	Nikita	**Chernomyrdin**	Biomedical applications of terahertz solid immersion microscopy	Oral
	Vladimir	**Manuilov**	Electron-optics systems with decreased life-time of trapped electrons for terahertz band gyrotrons	Oral	Vladislav	**Kurin**	Active Josephson traveling wave antennae as prospective terahertz oscillators	Oral					Andrei	**Postnikov**	A device to inspect a skin cancer tumour in the terahertz range, transferring the image into the infrared	Oral
19:00-21:00	**Welcome party**															
Tuesday, 23.10.2018																
	Plenary session 2															
	P3. **Andrew K. Martusevich** Alexander V. Kostrov *"Biomedical applications of microwave radiation: innovative approaches"* (40 min)															
	P4. **Stelios Tzortzakis** *"Extreme THz fields from near and mid-infrared laser filaments"* (40 min)															
9:00-11:00	P5. **Chi Kuang Sun** *"Femtosecond Acoustics and Terahertz Ultrasonics"* (40 min)															
11:00-11:30	**Coffe break**															

11:30-13:30	**S1.2 Electronic sources of THz & MW radiation, synchrotron radiation, free-electron lasers**				**S2.2 Optoelectronic & solid-state sources of THz radiation**				**S3.2 Generation of THz radiation by intense laser pulses**				**S6.1 Study of materials (including nano- and metamaterials) with the help of THz & MW radiation. Time-domain and CW spectroscopy**			
	Gun-Sik	**Park**	THz generation from high-Q Fano metallic metamaterial	Invited	Viktor	**Ustinov**	Molecular beam epitaxial growth of semiconductor heterostructures for THz electronics	Keynote	Alexander	**Shkurinov**	Terahertz Wave Generation from Liquied Gas	Invited	Leonid	**Surin**	Millimeter-wave spectroscopy of weakly bound molecular complexes and small clusters	Invited
	Andrey	**Pankratov**	Thermal regimes and THz generation from BSCCO mesas	Oral	Valery	**Shastin**	Terahertz lasers based on donor intracenter transitions in silicon.	Invited	Alexander	**Popov**	New Approach to Generation and Amplification of the THz Radiation in Plasma Created by Intense Two-Color Laser Fields	Invited	Robin	**Bocquet**	Developments on a 200 GHz chirped pulse experiment at Dunkerque	Invited
	Andrey	**Arzhannikov**	High power THz-range Wave generation based on Transformation of Plasma Waves Pumped by High-current Relativistic Electron Beam	Oral	Edik	**Rafailov**	Towards efficient and tunable generation of THz radiation from quantum dot based ultrafast photoconductive antennae.	Invited	Alexander	**Silaev**	Laser-plasma generation of tunable ultrashort pulses in terahertz and mid-infrared ranges	Oral	Evgeniy	**Chesnokov**	The first observation of the free induction signals of OH radicals in the terahertz region	Invited
	Andrei	**Savilov**	THz radiation of stabilized dense electron bunches	Oral	Gaël	**MOURET**	Frequency comb for THz metrology	Oral	Sergey	**Stremoukhov**	Terahertz radiation in two-color laser fields: from single atom to extended gas response	Oral	Maksim	**Koshelev**	Accurate broadband THz molecular spectroscopy	Oral
	Alexander	**Vikharev**	Generation of powerful subterahertz superradiance pulses for high gradient acceleration of charged particles	Oral	Dmitry	**Ponomarev**	Plasmonic terahertz antennas with high-aspect ratio metal gratings	Oral	Pavel	**Chizhov**	Modulation of two-color laser-induced filament terahertz emission by effective length variation.	Oral	Tatyana	**Odintsova**	Far IR continuum absorption of H216O and H218O	Oral
	Andrea	**Doria**	Novel Schemes for Compact FELs in the THz Region: ENEA Experience and Perspectives	Invited					Aleksandr	**Ushakov**	Backward terahertz emission from two-color laser induced plasma spark	Oral	Alexander	**Tsvetkov**	Recent results on THz gyrotron-based molecular spectroscopy	Oral
13:30-14:30	**Lunch**															
14:30-16:00	**Poster session 1 (Sections S6-S10)**															
16:00	**Excursion**															

Wendsday, 24.10.2018																
	Plenary session 3															
9:00-11:00	P6. **Alessandro Tredicucci** · *Terahertz quantum cascade lasers: what way forward?* (40 min) P7. *To be announced* (40 min) P8. (conference sponsors) **Steffen Heuel**, Tobias Koeppel, Sherif Ahmed; Rohde & Schwarz, Munich, Germany; *Measurement of radome material for 77/79 GHz automotive radar integration* (30 min)															
11:00-11:30	**Coffe break**															
11:30-13:30	**S1.3 Electronic sources of THz & MW radiation, synchrotron radiation, free-electron lasers**				**S4.1 Quantum cascade lasers**				**S3.3 Generation of THz radiation by intense laser pulses**				**S10.2 Medical and biological applications of THz radiation**			
	Naum	**Ginzburg**	Generation of Sub-Terahertz Surface Waves by Relativistic Electron Beams: Quasioptical Theory, Simulations and Experiments	Oral	Luigi	**Consolino**	Metrological-grade THz radiation	Invited	Fabian	**Rotermund**	THz nonlinear photonics: generation and applications	Invited	Olga	**Smolyanskaya**	Complex study of interaction of terahertz radiation with bio-like objects: theoretical and numerical modelling, real objects and phantom experiments	Invited
	Pascal	**Roy**	Intense THz coherent Synchrotron Radiation for Ultra High resolution Spectroscopy and Ultra-fast THz measurements	Invited	Alexander	**Andronov**	Bloch and Wannier-Stark THz emissions in superlattices: rival of Quantum Cascade Laser?	Oral	Kodo	**Kawase**	Multi wavelength injection-seeded THz parametric system	Invited	Alla	**Polyakova**	The mechanism of action of microwave radiation on the parameters of homeostasis in living systems	Oral
	Nikolai	**Peskov**	Development of powerful long-pulse Bragg FELs operating from sub-THz to THz bands based on linear induction accelerators: recent results and projects	Oral	Rostislav	**Arkhipov**	Generation of ultra-short pulses via self-induced transparency mode-locking regime in lasers	Invited	Andrey	**Brantov**	Laser induced THz Sommerfeld waves along metal wire.	Oral	Vladimir	**Zapevalov**	High-power microwaves against locusts and other harmful animals	Oral
	Andrey	**Grigoriev**	Problems of amplifier klystron advancing into terahertz band	Oral	Andrey	**Babichev**	Quantum-cascade lasers of mid-IR spectral range: epitaxy, diagnostics and device characteristics	Invited	Andrey	**Kuratov**	Plasma mechanisms of terahertz electromagnetic wave generation due to intense laser-plasma interaction	Oral	Sergey	**Peltek**	Nonthermal impact of terahertz (THz) radiation on living systems	Oral
	Evgenee	**Myasin**	SUBTHZ OROTRON WITH ONE AND TWO ELECTRON BEAMS	Oral	Rustam	**Khabibullin**	Terahertz quantum cascade laser with silver- and gold-based waveguide	Invited	Abel	**Woldegeorgis**	Generation of sub GV/m longitudinal terahertz electric fields from intense laser-solid density plasma interactions	Oral	Vasyl	**Denysenkov**	DNP APPLICATIONS AT 9.4 TESLA BY USING TERAHERTZ IRRADIATION	Oral
	Nikita	**Ryskin**	Development and modeling of miniaturized traveling-wave tubes in millimeter and sub-THz band	Oral	Yury	**Lobanov**	Characterization of the THz QCL Using Fast Superconducting Hot Electron Bolometer	Oral	Ivan	**Oladyshkin**	Role of surface plasmons in laser-induced THz generation from metals	Oral				
13:30-14:30	**Lunch**															
14:30-16:30	**S1.4 Electronic sources of THz & MW radiation, synchrotron radiation, free-electron lasers**				**S4.2 Quantum cascade lasers**				**S3.4 Generation of THz radiation by intense laser pulses**				**S10.3 Medical and biological applications of THz radiation**			
	Alexander	**Marek**	SIMULATION OF COMPONENTS FOR GYRO-DEVICES COUPLED IN A FEEDBACK LOOP TO GENERATE ULTRA-SHORT RF PULSES	Oral	Alexei	**Baranov**	Long wavelength InAs-based quantum cascade lasers.	Keynote	Matteo	**Clerici**	Broadband THz generation and detection	Invited	Olga	**Cherkasova**	Study of blood and its components by terahertz pulsed spectroscopy	Invited

	Vladislav	**Zaslavsky**	Terahertz-Range Gyrodevices of Planar Geometry	Oral	Andrey	**Khudchenko**	Phase-locking Techniques for THz Quantum Cascade Lasers	Invited	Sergey	**Bodrov**	A modified tilted-pulse-front excitation scheme for efficient terahertz generation in LiNbO3	Oral	Maxim	**Nazarov**	Solutions spectroscopy in the extended THz frequency range	Invited
	Dmitry	**Sobolev**	3D printed periodic structures for subterahertz sources	Oral	Kirill	**Maremyanin**	Investigation of the emission spectra of pulsed THz quantum cascade lasers and their use for magnetospectroscopy of semiconductors	Oral	Sergey	**Sychugin**	Generation of DC fields ahead of ultrashort laser pulses in electro-optic crystals	Oral	Ilya	**Ozheredov**	Application of THz radiation for in situ control of eye cornea hydration level	Invited
	S7.1 Interaction of high-power THz and MW radiation with matter. Application of THz radiation for the research and control of ultrafast process in physics, chemistry and biology				Maxim	**Nazarov**	Polymer waveguides for THz QCL radiation delivery and filtering	Invited	Yury	**Klimachev**	THz sources based on frequency conversion of multi-line molecular lasers in nonlinear crystals and on optically pumped molecular lasers	Oral	Mikhail	**Khodzitsky**	THz time-domain spectroscopy for non-invasive assessment of water content in biological samples	Oral
	Vladimir	**Pavelyev**	Terahertz optical elements for control of high-power laser irradiation	keynote	Ivan	**Vasil'evskii**	Temporal stability and absolute composition issues in molecular beam epitaxy of AlGaAs/GaAs THz QCL	Oral	Nickolay	**Kuzechkin**	Study of the cluster formation dynamics and its affect on generation of THz and X-Ray radiation in the expanding gas jet	Oral	**S6.2 Study of materials (including nano- and metamaterials) with the help of THz & MW radiation. Time-domain and CW spectroscopy**			
	Oleg	**Chefonov**	INTERACTION OF HIGH-POWER TERAHERTZ RADIATION WITH METALLIC FILMS	Oral	Fedor	**Zubov**	3 THz quantum-cascade laser with metallic waveguide based on resonant-phonon depopulation scheme	Oral	Igor	**Kinyaevskiy**	CO laser down-conversion into the THz range with ZnGeP2 crystal	Oral	Konstantin	**Motovilov**	Water and conductivity in bioorganic materials: complicated interplay	Invited
													Elena	**Zhukova**	H2O molecules hosted by a crystalline matrix – new state of water.	Invited
16:30-17:00	**Coffe break**															
17:00-18:30	**Poster session 2 (Sections S1-S5)**															
20:00	**Conference dinner**															

Thursday, 25.10.2018																		
	Plenary session 4																	
9:00-9:40	P9. *To be announced* (40 min)																	
09:40-11:10	**Special Section "Status of the User Facilities Centers"**				**S9.1 Systems of security and non-destructive control using THz and MW radiation. Remote sensing with THz radiation. Communication in THz frequency range**				**S7.2 Interaction of high-power THz and MW radiation with matter. Application of THz radiation for the research and control of ultrafast process in physics, chemistry and biology**								
	Mikhail	**Glyavin**	From millimeter to microns - IAP RAS powerful sources for various applications	keynote	Vyacheslav	**Trofimov**	Detection and identification of a substance with an inhomogeneous surface using the effective time-dependent THz spectroscopy method and emission frequency up-conversion	Invited	Andrey	**Savel'ev**	Nonlinear Transfer of Intense Few Cycle Terahertz Pulse Through Opaque semiconductors	Invited					
	Young Uk	**Jeong**	Ultrafast THz-pump & Electron-probe Facility at KAER	keynote	Yulia	**Choporova**	Measuring the topological charge of vortices with diffraction and interference tecniques	Oral	Sergei	**Kozlov**	Disappearance of Self-Focusing for Few-Cycle THz Pulses	Invited					
	Oleg	**Shevchenko**	Novosibirsk free electron laser facility	keynote	Dmitrii	**Pavelev**	Devices and system based on quantum semiconductor superlattices for the frequency range 0.1-10 THz.	Oral	Maria	**Krikunova**	Ultrafast multi-electron dynamics studied with THz-field streaking	Oral					
					Andrew	**Angeluts**	IInfluence of pollution and extraneous inclusions on the scattering of THz radiation by fabric	Oral	Evgeny	**Mashkovich**	Terahertz induced magnetization dynamic in a weak ferromagnet FeBO3	Oral					
					Alexander	**Tsvetkov**	Using a gyrotron as a source of modulated radiation for data transmission systems in the terahertz range	Oral	Sergey	**Pavlov**	Challenges of Raman scattering at THz frequencies	Oral					
11:10-11:40	**Coffe break**																	
11:40-13:30	**Special Section "Status of the User Facilities Centers"**				**S5.1 Detection of THz & MW radiation. Metrology in THz frequency range**								**S6.3 Study of materials (including nano- and metamaterials) with the help of THz & MW radiation. Time-domain and CW spectroscopy**					
	Boris	**Knyazev**	Recent experiments at NovoFEL user stations	keynote	Galiya	**Kitaeva**	Optical – terahertz biphotons	Invited					Alexey	**Nikitin**	Terahertz plasmonics: achievements and prospects	Invited		
	John Michael	**Klopf**	THz science at FELBE	keynote	Igor	**Ilyakov**	Terahertz Electro-Optic Sampling in Crystals with High Natural Birefringence	Oral					Oleg	**Potaturkin**	Oxide nonlinear crystals: optical properties and phase-matching for terahertz wave generation	Invited		
	G.P.	**Gallerano**	Terahertz and mm-wave applications at ENEA-Frascati	keynote	Anna	**Bogatskaya**	Optical-mechanical analogy approach for the purposes of detection of IR-MW radiation	Oral					Evgeny	**Serov**	Dielectrics for output windows of medium power gyrotrons	Oral		
					Valery	**Koshelets**	Low-noise THz-range SIS Receivers for Ground-based and Space Radio Astronomy	Oral					Sergey	**Bodrov**	Terahertz induced optical second harmonic generation from dielectric interfaces: mechanism and application	Oral		

					Alexande	**Shugurov**	Terahertz pulse detection by direct intensity modulation of the probe laser beam in GaAs	Oral					Marat	**Gafurov**	Coherent control of electron-nuclear states of rare-earth ions in crystals using radio-frequency and microwave radiation.	Oral
													Mikhail	**Khodzitsky**	Optically tunable dielectric properties of single-walled carbon nanotubes for terahertz wave applications	Oral
13:30-14:30	**Lunch**															
14:30-16:00	**S9.2 Systems of security and non-destructive control using THz and MW radiation. Remote sensing with THz radiation. Communication in THz frequency range**				**S5.2 Detection of THz & MW radiation. Metrology in THz frequency range**				**S7.3 Interaction of high-power THz and MW radiation with matter. Application of THz radiation for the research and control of ultrafast process in physics, chemistry and biology**				**S6.4 Study of materials (including nano- and metamaterials) with the help of THz & MW radiation. Time-domain and CW spectroscopy**			
	Patrick	**Mounaix**	Submillimeter wave Tomography and image processing advances : Applications additive manufacturing quality control	Invited	Vyache slav	**Vdovin**	Arrays of annular antennas with SINIS bolometers for SubTHz radioastronomy	Oral	Vitaly	**Kubarev**	Experiments using extreme parameters of NovoFEL radiation	Invited	Dmitry	**Khokhlov**	PT-symmetric terahertz photoconductivity in Hg1-xCdxTe zero-gap semiconductors	Oral
	Leoni d	**Skvortsov**	The concept of construction of inspection systems based on quantum-cascade lasers	Oral	Kirill	**Rudakov**	Superconducting thin-film THz structures development based on SIS junctions	Oral	Roman	**Zhukavin**	Relaxation of Coulomb states in semiconductors probed by FEL radiation	Oral	Alexand er	**Boris**	Exploring in-gap excitations in high-Tc superconducting films by THz and infrared spectroscopy	Invited
	S8. Terahertz & microwave imaging: tomography, holography and near-field microscopy				Alexand er	**Sobolev**	Wideband metamaterial-based array of SINIS bolometers	Oral					Nazar	**Nikolaev**	Angle-Susceptible Sensing Metasurface in Terahertz Regime	Oral
	Weiw ei	**Liu**	Subwavelength resolution THz imaging by femtosecond laser filament	Invited	Andrey	**Khudchenko**	Sideband Separating SIS receiver for 650 GHz developed by NOVA	Oral					Viachesl av	**Popov**	Terahertz plasmonic photocurrents in graphene nanostructures	Oral
	Irina	**Dolganova**	Impact of Scattering in Quasi-Ordered Structures on THz Imaging	Oral	Leonid	**Kuzmin**	Efficient Electron Self-Cooling in Cold-Electron Bolometers	Oral					Mikhail	**Bezhko**	Dielectric and Magnetic Material Characterization Techniques up to 1,5 THz	Oral
	Andre w	**Martusevic h**	Comparative study of dielectric properties of the skin of human and laboratory animals	Oral	Alexand er	**Mamrashev**	Terahertz time-domain spectrometer with precision delay line encoder	Oral								
16:00-16:30	**CLOSING SESSION (Hall A)**															