



Technical Program At a Glance

Day/Date		Time		Venue
Sunday 15-Sept.		08:00 – 17:30	REGISTRATION	South Lobby
	PM 3	19:00 – 21:00	WELCOME RECEPTION	Liujin Hall (流金厅)
Monday 16-Sept.	AM	08:30 – 12:00	OPENING CEREMONY & GROUP PHOTO & KEYNOTE SPEECH	Room: Function 1
	PM	14:00 – 17:10	ORAL SESSION	Room: Function 2,3,11,12
Tuesday 17-Sept.	AM	08:30 – 11:40	ORAL SESSION	Room: Function 2,3,11,12
	PM	14:00 – 17:30	ORAL SESSION	Room: Function 2,3,11,12
Wednesday 18-Sept.	AM	08:20 – 12:20	PLENARY SESSION	Room: Function 1
	PM1	14:00 – 15:40	ORAL SESSION	Room: Function 2,3,11,12
	PM 2	15:40 – 17:30	POSTER SESSION	Function Hall
	PM 3	19:00 – 21:00	AWARD BANQUET	Grand Ballroom
Thursday 19-Sept.	AM	09:00 – 12:10	ORAL SESSION	Room: Function 2,11,12
	PM	14:00 – 17:00	TECHNICAL VISIT	
Friday 20-Sept.	AM	08:30 – 13:00	TECHNICAL VISIT	

Technical Program

Day/Date	Time	Room: Function 2	Room: Function 3	Room: Function 11	Room: Function 12
Monday	AM 1 08:30 – 11:40	WELCOME SESSION			
16-Sept.	PM 1 14:00 – 15:20	TC 01 Hongge Ma, Chaouki Kasmi	SS 02 Wei Jia, Jae Wook Lee	TC 07 (IN MEMORY OF PROFESSOR NITSCH) Sergey Tkachenko, Dave Giri	TC 10 + TC 11 + TC 15 Shuhong Wang, Jin Soo Choi
	PM 2 15:50 – 17:10	TC 01 Lihua Shi, Chang-Su Huh	SS 02 + TC 06 Jae Wook Lee, Wei Jia	TC 07 (IN MEMORY OF PROFESSOR NITSCH) Dave Giri, Sergey Tkachenko	TC 12 + SS 01 Jin Soo Choi, Hongzhi Yao
Tuesday 17-Sept.	AM 1 08:30 – 09:50	TC 01 Dave Giri, Hongge Ma	TC 06 Minghao Wang, Marcos Rubinstein	TC 07 Sergey Tkachenko, Shengquan Zheng	TC 13 Bill Radasky, Xiong Wu
	AM 2 10:20 – 11:40	TC 01 Jun Zhang, Dave Giri	TC 06 Marcos Rubinstein, Minghao Wang	TC 07 Shengquan Zheng, Nicolas Mora	TC 13 + TC 17 Xiong Wu, Yury Parfenov
	PM 1 14:00 – 15:20	TC 01 + SS 05 Dave Giri, Zicheng Zhang	TC 06 Farhad Rachidi, Xueling Yao	TC 08 Lars-Ole Fichte, Guirong Ding	TC 17 Bill Radasky, Minghao Wang
	PM 2 15:50 – 17:10	TC 01 + TC 14 Chang-Su Huh, Yazhou Chen	TC 06 + TC 03 Xueling Yao, Farhad Rachidi	TC 08 + TC 04 + SS 04 Guirong Ding, Lars-Ole Fichte	TC 05 + TC 16 Armin Kaelin, Nicolas Mora
Wednesday 18-Sept.	AM 1 08:30 – 12:00	Plenary Session			
	PM 1 14:00 – 15:40	SS 06 Chunming Liu, Edward Savage	TC 02 Dave Giri, Lihua Shi	TC 16 Jie Guo, Armin Kaelin	SS 04 Mai Lu, Lars-Ole Fichte
	PM 2 15:40 – 17:30	Poster Session			
	PM 3 19:00 – 21:00	Banquet			
Thursday 19-Sept.	AM 1 08:30 – 09:50	TC 04 Jun Guo, Bill Radasky	Interactive Forum with Industry	TC 09 Dave Giri, Sen Yan	TC 03 Lihua Shi, Jae Wook Lee
	AM 2 10:20 – 11:40	TC 04 Bill Radasky, Jun Guo		TC 18 Feng Qin, Dave Giri	TC 03 Jae Wook Lee, Lihua Shi
	PM 1 14:00 – 17:00	Technical visit			
Friday 20-Sept.	AM 08:30 – 13:00	Technical visit			

Monday,2019/09/16	Room: Function 2	Room: Function 3
2:00 – 15:20	TC 01: Sources, Antennas, Facilities (I)	SS 02: Reliability and Stability of HPEM Test (I)
Chair	Hongge Ma, Chaouki Kasmi.	Wei Jia, Jae Wook Lee
14:00-14:20	TC01-1 Investigation on Low Impedance High Voltage Generator Based on UV Preionization Gap Switch (#143) Song Li, Jingming Gao, Chengyu Shi, Xiao Liu, Hao Cai, Hanwu Yang (National University of Defense Technology).	SS02-1 A 400 kV Gas-insulated Low-jitter Compact Marx Generator (#11) (BPA finalist) Linshen Xie, Zhiqiang Chen, Wei Jia (Northwest Institute of Nuclear Technology).
14:20-14:40	TC01-2 High-Power Beam Steering Antenna Using A Slot Waveguide by Adjusting Its Wide Side Dimension (#7) Yiming Yang, Shengren Peng, Chengwei Yuan, Baoliang Qian (National University of Defense Technology).	SS02-2 The Self-breakdown Characteristics of the Output Switch for EMP Simulator (#24) (BPA finalist) Fan Guo, Yanzhao Xie, Wei Jia (Xi'an Jiaotong University).
14:40-15:00	TC01-3 An Overmoded RBWO Operating at Ka Band with Low Magnetic Field (#9) Shuang Li (Northwest Institute Of Nuclear Technology), Changhua Chen, Dongyang Wang.	SS02-3 Analysis of the Primary Current Distribution in Tesla-type Pulse Generators (#41) Shi He (Xi'an Jiaotong University).
15:00-15:20	TC01-4 Cost231-Hata Model is Modified Based on Memetic Algorithm (#28) Han Zhang, Xinli Zhou, Xiaodi Liu.	SS02-4 Analysis of Fields of Irradiation Cavities with Different Sizes (#49) Xiangqin Zhu, Changhua Chen, Taijiao Du, Long Hu, Libing Cai (Northwest Institute of Nuclear Technology).

Monday, 2019/09/16	Room: Function 11	Room: Function 12
14:00 – 15:20	TC 07: Analytic and Numerical Modeling(I) (IN MEMORY OF PROFESSOR NITSCH)	TC 10: Radar Systems Aspects TC 11 : Target Detection/Imaging TC 15 : Meta Materials for High-Power Applications
Chair	Sergey Tkachenko, Dave Giri	Shuhong Wang, Jin Soo Choi
14:00-14:20	TC07-1 Modeling the Triggering Requirements of Synchronized Marx Generators (#15) Nicolas Mora, Bertrand Daout (Montena Technology).	TC10-1 A FPGA Acceleration for the Singularity Expansion Method (#121) Andres Gallego, Felix Vega (Universidad Nacional de Colombia).
14:20-14:40	TC07-2 Performance Analysis of Follower Jamming in FH-2FSK Communication (#48) Xinfeng Fan, Zhiliang Tan, Peijiao Song.	TC11-1 Enhanced Data Analysis for the Microwave Power Spectroscopy Method (#61) (BPA finalist) Carl Friedrich Rädcl , Marcus Stiemer (Helmut Schmidt University (HSU)), Tomas Hurtig (Swedish Defense Research Agency (FOI)).
14:40-15:00	TC07-3 On the Maximum Voltage Induced by a Wideband HPEM Field in Cascaded Lines with Piecewise-Linear Layout (#65) (BSPA finalist) Tao Liang, Giordano Spadacini, Flavia Grassi, Sergio Pignari (Politecnico di Milano).	TC15-1 Study on the Damage Cumulative Effect of the Microwave Pulse on the Pin Limiter (#109) Jingtao Zhao (Institute of Applied Electronics, CAEP).
15:00-15:20	TC07-4 Singularity Expansion Method (Sem) for Open-Circuited Wires Above Ground (#66) Felix Middelstaedt, Sergey V. Tkachenko, Ralf Vick (Otto von Guericke University).	TC15-2 A Multi-Beam Metamaterial High-Power Microwave Source (#129) Hamide Seidfaraji, Ahmed Elfrgani, Christos Christodoulou, Edl Schamiloglu (University of New Mexico).

Monday, 2019/09/16	Room: Function 2	Room: Function 3
15:50 – 17:10	TC 01: Sources, Antennas, Facilities (II)	SS 02: Reliability and Stability of HPEM Test (generator, gas switch, peaking capacitor, and sensor) (II)+TC 06: Lightning EM Effects/Measurement (V)
Chair	Lihua Shi, Chang-Su Huh	Jae Wook Lee, Wei Jia
15:50-16:10	TC01-5 Numerical Study of Asymmetric Modes Competition in Slow Wave Structure Loaded by Conductivity Anisotropic Media (#39) (BSPA finalist) Zhiqiang Fan (Tsinghua University), Jun Sun, Zhimin Song, Yibing Cao, Ping Wu, Guangshuai Zhang (Northwest Institute of Nuclear Technology).	SS02-5 Development of EMP Survivability Test Equipment for Conductive Gaskets (#67) Ya Li, Zhongyuan Zhou (Southeast University).
16:10-16:30	TC01-6 Optimization of the Gtem Cell Resistive Network (#44) Binwen Wang, Tingyong Jiang, Zhen Liu, Hui Ning, Lei Shi (Northwest Institute of Nuclear Technology).	SS02-6 Process Analysis for the Insulation Failure of a Peaking Capacitor in an EMP Simulator (#69) Zhiqiang Chen, Wei Jia, Junping Tang, Junna Li, Fan Guo, Shengchang Ji (Xi'an Jiaotong University, Northwest Institute of Nuclear Technology).
16:30-16:50	TC01-7 Influence of Foilless Diode Parameters on Radial Beam Oscillation (#51) (BPA finalist) Guangshuai Zhang, Jun Sun, Ping Wu (Northwest Institute of Nuclear Technology).	TC06-15 Observations of Lightning Discharges to the 356 m High Shenzhen Meteorological Tower (#142) Mingli Chen (The Hong Kong Polytechnic University), Zongxu Qiu (Shenzhen Meteorological Bureau), Zilong Qin (The Hong Kong Polytechnic University), Yuexing Yang (Shenzhen Meteorological Bureau), Yan Gao (The Hong Kong Polytechnic University), Hongbo Guo (Shenzhen Meteorological Bureau).
16:50-17:10	TC01-8 Effect of Longitudinal Mode Transition on Power Handling Capacity of TM01 and TM02 in Corrugated Waveguides (#58) Yan Teng, Dongyang Wang, Shuang Li, Dewen Yang, Yanchao Shi, Ping Wu, Xiaoling Wu (Northwest Institute of Nuclear Technology).	

Monday, 2019/09/16	Room: Function 11	Room: Function 12
15:50 – 17:10	TC 07: Analytic and Numerical Modeling (II) (IN MEMORY OF PROFESSOR NITSCH)	TC 12: Explosive Devices - Effects and Protection SS 01: EM interactions with Nonlinear Circuits in Complex Systems, Anlage Steven
Chair	Dave Giri, Sergey Tkachenko	Jin Soo Choi, Hongzhi Yao
15:50-16:10	TC07-5 Singularity Expansion Method for Thin Wires with the Full-wave Transmission Line Theory (#74) Juegen Nitsch, Sergey Tkachenko, Felix Middelstaedt, Ralf Vick (Otto-von-Guericke Universität Magdeburg).	TC12-1 Effect Research on HPEM to Explosives (#19) Hongzhi Yao, Tuan Zhao, Xiangfei Ji, Ming Yin (Science and Technology on Applied Physical Chemistry Laboratory).
16:10-16:30	TC07-6 Uncertainties Evaluation of Numerical Simulations with a FD-TD Solver - GORF3D (#85) (BPA finalist) Laurent LABARBE, Jean-Pierre ADAM, Jean-Marc LOPEZ (CEA Gramat).	TC12-2 Study on the Test Method of Induced Current of EED (#33) Tuan ZHAO, Hong Zhi YAO, Xiang Fei JI, Rui ZHAGN (ShaanXi Applied Physic-Chemistry research).
16:30-16:50	TC07-7 Singularity Expansion Method as Applied to a Linear Antennas in Conducting Media (#107) Dr D V Giri (Pro-Tech and University of New Mexcico), Dr F M Tesche (EM Consultant (Retired)).	TC12-3 Safety Analysis of EED in Nuclear Electromagnetic Pulse Radiation (#35) Xiangfei JI, Hongzhi YAO, Tuan ZHAO (Shaanxi Applied Physics-chemistry Research Institute).
16:50-17:10	TC07-8 High Frequency Electromagnetic Field Coupling with Transmission Lines of Finite Length in a Rectangular Resonator (#94) Sergey Tkachenko, Juergen Nitsch, Moustafa Raya, Ralf Vick (Otto-von-Guericke University Magdeburg).	SS01-1 Research on Microwave Suppression Effects on RF Front-end Device (#104) Zidong Chen (Institute of Applied Electronics).

Tuesday, 2019/09/17	Room: Function 2	Room: Function 3
08:30 – 9:50	TC 01: Sources, Antennas, Facilities (III)	TC 06: Lightning EM Effects/Measurement (I)
chair	Dave Giri, Hongge Ma	Minghao Wang, Marcos Rubinstein
8:30-8:50	TC01-9 Simulation of an X-band Dual-mode Relativistic Backward Wave Oscillator Operating at Low Magnetic Field (#62) Renzhen Xiao, Yanchao Shi, Huida Wang (Northwest Institute of Nuclear Technology).	TC06-1 Characterization of CG Flashes with Multiple Terminations Using a 3D Lightning Mapping System Falma (#4) Panliang Gao, Daohong Wang, Dongdong Shi, Ting Wu, Nobuyuki Takagi (Electronic and Computer Engineering Gifu University).
8:50-9:10	TC01-10 Measurement and Analysis of the Breakdown Strength of Different Liquid Dielectric Materials (#63) Nicolas Mora (Montena Technology), Amir Mostajabi (Swiss Federal institute of Technology, EPFL), Bertrand Daout (Montena Technology), Farhad Rachidi (Swiss Federal Institute of Technology, EPFL).	TC06-2 Simulation on Lightning Electromagnetic Environment (#10) Hongzhi Ouyang, Xueling Yao, Jingliang Chen (Xi'an Jiaotong University).
9:10-9:30	TC01-11 Advances of X-Band Relativistic Triaxial Klystron Amplifier Research at the National University of Defense Technology (#81) (BPA finalist) Jinchuan JU, Wei ZHANG, Yunxiao ZHOU, Jun ZHANG, Huihuang ZHONG (National University of Defense Technology).	TC06-3 Characteristics of Lightning Faults of 220kV and above Overhead Transmission Lines in Zhejiang Province in Last 15 Years (#12) Xiangxian Zhou, Hangwei Tong, Jun Tong, Wendong Jiang (State Grid Zhejiang Electric Power), Yang Zou (CEEC Zhejiang Electric Power Design institute), Te Li (State Grid Zhejiang Electric Power Research institute).
9:30-9:50	TC01-12 Preliminary Test of High Power RF Generation From 6H-SiC Photoconductive Switch (#83) Qilin Wu, Yuxin Zhao, Tao Xun, Hanwu Yang (National University of Defense Technology), Wei Huang (Chinese Academy of Sciences).	TC06-4 Multiple Antennas Radiation Continuous Observation System and its Application in Lightning Mapping (#21) (BSPA finalist) Shulei Li, Lihua Shi, Shi Qiu (National Key Laboratory on Electromagnetic Environmental Effects and Electro-Optical Engineering).



Tuesday, 2019/09/17	Room: Function 11	Room: Function 12
08:30 – 9:50	TC 07: Analytic and Numerical Modeling (III)	TC 13: EM Transients in UHV/EHV Trans Lines & Substations (I)
Chair	Sergey Tkachenko, Shengquan Zheng	Bill Radasky, Xiong Wu
8:30-8:50	TC07-9 Susceptibility Atmosphere Transmission Characteristics of Repetitive High Power Microwave Pulse (#91) Daojie Yu, Kai He, Tongcheng Zhao, Mengjuan Chai, Beibing Cai, Jinjin Wei, Dongfang Zhou (Information Engineering University).	TC13-1 Prediction of Trichel Pulse Amplitude for Smooth Conductors and Stranded Conductors Based on Improved Effective Ionization Integral (#2) Pengfei Xu, Bo Zhang, Jinliang He (Tsinghua University), Jianben Liu (China Electric Power Research Institute).
8:50-9:10	TC07-10 Modeling of HEMP Conducted Responses Using State-Space System Identification Method (#88) (BSPA finalist) Yuhao Chen, Kejie Li, Yanzhao Xie (Xi'an Jiaotong University).	TC13-2 Magnetic Flux Density Distribution Analysis of a Reactor Considering Operating Current and Structure Size (#55) Fanwu Chu, Xiaoyan Lei (China Electric Power Research Institute), Ying Fu (State Grid Corporation of China), Qian Zhao (Xi'an Herong Electric Power Equipment Co., Ltd.), Xiong Wu, Yi Xiong (China Electric Power Research Institute).
9:10-9:30	TC07-11 HEMP Radiated Environment Distribution Simulation and Statistical Analysis (#110) (BSPA finalist) Ning Dong, Yan-zhao Xie (Xian Jiaotong university).	SS06 Analysis on Eddy Current Loss and Temperature Distribution for Ultra High Voltage Transformer in No-Load (#126) Mingyang Li, Zezhong Wang, Bing Li, Ke Liu, Mengzhen Xuan, Suxin Guo (NORTH CHINA ELECTRIC POWER UNIVERSITY).
9:30-9:50	TC07-12 Correlation Between Time and Frequency Domain Shielding Effectiveness of Metallic Enclosures with Apertures (#115) (BPA finalist) Gang Wu, Peng Chen, Linshen Xie, Wei Wang (Northwest Institute of Nuclear Technology).	TC13-4 Effects of Control Algorithms on Electromagnetics Transient Process in UHVDC Transmission System (#92) (BSPA finalist) Fang Yu, Jie Guo, Yuying Wu (Xi'an Jiaotong University).



Tuesday, 2019/09/17	Room: Function 2	Room: Function 3
10:20 – 11:40	TC 01: Sources, Antennas, Facilities (IV)	TC 06: Lightning EM Effects/Measurement (II)
Chair	Jun Zhang, Dave Giri	Marcos Rubinstein, Minghao Wang
10:20 – 10:40	TC01-13 A Frequency-agile Relativistic Magnetron with Axial Tuning (#87) (BPA finalist) Fen Qin (Institute of Applied Electronics, China Academy of Engineering Physics).	TC06-5 The Effect of Current intensity and Propagation Distance on Risetime (#22) Zhigang Lu, Shi Qiu, Shaolei Li (National Key Laboratory on Electromagnetic Environmental Effects and Electro-Optical Engineering).
10:40-11:00	TC01-14 A Compact, Low Jitter, High Voltage Pulse Generator Based on Fractional-Turn Ratio Saturable Pulse Transformer (#103) (BSPA finalist) Jiuyuan Geng, Jianhua Yang, Ting Shu (National University of Defense Technology).	TC06-6 Two Scenarios of Positive Lightning Leader Channel Branching (#32) Xiushu Qie, Shanfeng Yuan, Rubin Jiang (LAGEO, Institute of Atmospheric Science, Chinese Academy of Science).
11:00-11:20	TC01-15 Compact Small-Sized Pulsed Power Sources Arc-01/02 and Their Applications (#117) Zicheng Zhang, Hanwu Yang, Shifei Liu, Yuwei Wang, Jiande Zhang (National University of Defense Technology).	TC06-7 Assessment of Varistor Withstand Capacity Against CG Generated Transient Voltages (#37) Nilantha Sapumanage, Sankha Nanayakkara, Sidath Abegunawardana, Mahendra Fernando (Department of Physics University of Colombo), Vernon Cooray (Department of Engineering Science Uppsala University).
11:20-11:40	TC01-16 Impact Ionization Front in the Initially Unbiased Layered Silicon Structure (#118) Gan-ping Wang (Key Laboratory on High Power Microwave Technology).	TC06-8 Probabilistic Assessment on Selected SPD Efficiency (#38) (BPA finalist) Nilantha Sapumanage, Sankha Nanayakkara, Sidath Abegunawardana, Mahendra Fernando (Department of Physics University of Colombo), Vernon Cooray (Department of Engineering Science Uppsala University).



Tuesday, 2019/09/17	Room: Function 11	Room: Function 12
10:20 – 11:40	TC 07: Analytic and Numerical Modeling (IV)	TC 13: EM Transients in UHV/EHV Trans Lines & Substations (II) TC 17: Evaluation of HEMP/EMI Impacts on Critical infrastructures (I)
Chair	Shengquan Zheng, Nicolas Mora	Xiong Wu, Yury Parfenov
10:20 – 10:40	TC07-13 The circuit model of linear-mode, vertical SiC PCSS (#119) Yuxin Zhao, Qilin Wu, Hanwu Yang (National University of Defense Technology).	TC13-5 A Non-Contact Approach for Lightning Strike and Fault Location of Transmission Lines by Broadband Electro-optic Field Sensors (#105) (BPA finalist) Chijie ZHUANG, Huaiyuan Yang, Rong Zeng (Tsinghua University), Shijun Xie (State Grid Sichuan Electric Power Research Institute), Hao Yu, She Wang (Tsinghua University).
10:40-11:00	TC07-14 Analysis of Electromagnetic Coupling to a Shielded Line Based on Extended BLT Equation (#125) Bao-Lin Nie (University of Electronic Science and Technology of China).	TC13-6 Electromagnetic Transient Simulation and Analysis Caused by 500kV Side Switching of Nuclear Power Plant (#116) Yuying Wu, Yunpeng Qiu, Jie Guo (Xi'an Jiaotong University).
11:00-11:20	TC07-15 Modeling of the Non-Vertical Risers at the End of the Transmission Lines Using an Equivalent Partial inductance (#132) (BPA finalist) Jun Guo (Xi'an Jiaotong University), Marcos Rubinstein (University of Applied Sciences Western Switzerland), Vernon Cooray (Uppsala University), Farhad Rachidi (Swiss Federal institute of Technology (EPFL)), Yan-zhao Xie (Xi'an Jiaotong University).	TC13-7 Development of VFT Test Platform (#128) Jun Zhao, Jiangong Zhang (China Electric Power Research institute), Zhiyang zou (NARI Technology Development Co., LDT).
11:20-11:40	TC07-16 Two-dimensional Numerical Simulation of Nanosecond Pulsed Discharge in Sulfur Hexafluoride Gas at High Pressure (#144) Haiyang Wang (Northwest Institute of Nuclear Technology).	TC17-1 Prediction of Radio Frequency in a Large Structure from External Electromagnetic Source (#18) Han-Hee Lee, Jae Wook Lee (Korea Aerospace university), Jong Hwa Kwon, Jeong Hwan Hwang, Chang Hee Hyung (Electronics and Telecommunications Research Institute (ETRI)).



Tuesday,2019/09/17	Room: Function 2	Room: Function 3
14:00 – 15:20	TC 01: Sources, Antennas, Facilities (V)	TC 06: Lightning EM Effects/Measurement (III)
Chair	Dave Giri, Zicheng Zhang	Farhad Rachidi, Xueling Yao
14:00-14:20	TC01-17 High Power Microwave Waveguide Slot Array Antenna with Grooves (#120) Yong Liao (Institute of Applied Electronics,CAEP).	TC06-9 Application of the FDTD Method to the Surge Analysis of a Transmission Line Tower with a Power Cable (#57) Akiyoshi Tatematsu (Central Research Institute of Electric Power Industry).
14:20-14:40	TC01-18 Investigation of Frequency Selective Surfaces in HPEM Applications (#123) Félix Vega, Fernando Albarracin-Vargas (National University of Colombia), Chaouki Kasmi (xen1thLabs, DarkMatter), Lars Ole Fichte (Helmut Schmidt University).	TC06-10 MARCOS: a VHF Lightning Mapping System and Applications (#70) (BPA finalist) Shi Qiu, Tao Wang, LiHua Shi (National Key Laboratory on Electromagnetic Environment Effects and Electro-Optical Engineering).
14:40-15:00	TC01-19 An UWB Radiation System and its Electromagnetic Interference Effect on UAV System (#138) Yangxin Qiu, Yanzhao Xie, Mingxiang Gao (Xi'an Jiaotong University).	TC06-11 Technical Paper for Lightning Test Standard of Automobiles from Japanese Automotive Standards Organization (#72) (BPA finalist) Kazuo Yamamoto (Chubu University).
15:00-15:20	TC01-20(from SS05) Investigation of Power Loss Caused by The Antenna Connected to a Gyromagnetic Nonlinear Transmission Line (#75) Yuwei Wang, Dongqun Chen, Zicheng Zhang, Shengguang Cao, Da Li (National University of Defense Technology).	TC06-12 Modeling of Composite Transmission Tower Under Direct Lightning Strokes Based on Electromagnetic Field Energy Principle (#101) Shuhong Wang, Youpeng Huangfu (Xi'an Jiaotong University).



Tuesday, 2019/09/17	Room: Function 11	Room: Function 12
14:00 – 15:20	TC 08: Bioeffects/Medical Applications of EM (I)	TC 17: Evaluation of HEMP/IEMI Impacts on Critical Infrastructures (II)
Chair	Lars-Ole Fichte, Guirong Ding	Bill Radasky, Minghao Wang
14:00-14:20	TC08-1 Effects of EMP on the Osteogenic Differentiation in hUC-MSCs (#5) Tian Wang, Gang Rui, Ling Guo, Yan Zhou, Guang-Zhou An, Gui-Rong Ding (Air force Medical University).	TC17-1 Research on HEMP Front-door Coupling Evaluation (#95) (BPA finalist) Yu Mao, Yan Wang, GuoShuai Zhen, XueFeng Qi (Aviation Key Laboratory of Science and Technology on Electromagnetic Environmental Effects 2Department of Avionics Shenyang Aircraft Design and Research Institute, AVIC).
14:20-14:40	TC08-2 A Compact Width-tunable High-voltage Nanosecond Pulse Generator for Nanoelectroablation (#36) Xin Rao (University of Electronic Science and Technology of China), Xiaodong Chen (Queen Mary University of London), Jun Zhou (University of Electronic Science and Technology of China).	TC17-2 Strong electromagnetic pulse harm and protection to the aircraft (#97) Tao Zhang, BaiHan Liu, ZhaoHui Lv, Yan Wang (Aviation Key Laboratory of Science and Technology on Electromagnetic Environmental Effects Shenyang Aircraft Design and Research Institute, AVIC, Shenyang Aerospace University,).
14:40-15:00	TC08-3 Simulation and Experiment Study of a High Shielding Effectiveness Suit (#59) Zhou Heng, Yao Jiawei, Cai Wanzeng, Jiang Tingyong (Northwest Institute of Nuclear Energy Technology).	TC17-3 Study on Electromagnetic Coupling Characteristics of Fuselage Cover Cavity Irradiated by HEMP (#98) XueFeng Qi, Yan Wang, GuoShuai Zhen, Yu Mao (Aviation Key Laboratory of Science and Technology on Electromagnetic Environmental Effects Shenyang Aircraft Design and Research Institute, AVIC).
15:00-15:20	TC08-4 Research on the Characteristics of Absorbed Dose in Rats under Radio Frequency (#60) Jiajin Lin, Jing Li, Guirong Ding, Shenglong Xu, Wei He (Air force Medical University).	TC17-4 Aircraft Nuclear Electromagnetic Pulse Effect and Protection Technology (#99) JinRong Zhu, WenJie Zhang (Aviation Key Laboratory of Science and Technology on Electromagnetic Environmental Effects 2Department of Avionics Shenyang Aircraft Design and Research Institute, AVIC).

Tuesday, 2019/09/17	Room: Function 2	Room: Function 3
15:50 – 17:10	TC 01: Sources, Antennas, Facilities (VI)+TC 14: Statistical Methods in HPEM	TC 06: Lightning EM Effects/Measurement (IV)
Chair	Chang-Su Huh, Yazhou Chen	Xueling Yao, Farhad Rachidi
15:50-16:10	TC01-21 Electrostatic Characteristics of Two Conducting Spheres in a Grounded Cylinder (#1) (BPA finalist) Dave Giri (Pro-Tech), Shubho Banerjee (Rhodes College).	TC06-13 Some Optimization Techniques of Lightning Field Calculations (#113) Marcos Rubinstein (University of Applied Sciences Western Switzerland, Yverdon-les-Bains), Antonio Sunjerga, Farhad Rachidi (Swiss Federal Institut of Technology, Lausanne).
16:10-16:30	TC14-01 Assessment Method of Sample Size Requirements for High Power Microwave Test (#130) Jiangchuan Lin (Institute of Applied Electronics,CAEP).	TC03-1 Detection and Localization of Lightning Damages in CFRP with Lamb Wave (#17) (BPA finalist) Shangchen Fu, Lihua Shi, Yinghui Zhou (National Key Laboratory on Electromagnetic Environmental Effects and Electro-optical Engineering).
16:30-16:50	TC01-22 A 40kV, 500kHz Solid-state Pulsed Power Generator Based on the Drift Step Recovery Diodes (#145) Haiyang Wang (Northwest Institute of Nuclear Technology).	TC03-2 Simulation Analysis on Return Conductor Settings for Lightning Indirect Effect of Metal Cabin (#73) Shangchen Fu, Lihua Shi, Yinghui Zhou (National Key Laboratory on Electromagnetic Environmental Effects and Electro-optical Engineering).
16:50-17:10		TC06-14 A Time Domain Detection Method for Weak NEMP Signal (#114) (BSPA finalist) Baofeng Cao, Yi Zheng, Rui Liang, Xueqin Zhang (Research Institute of Chemical Defense).



Tuesday, 2019/09/17	Room: Function 11	Room: Function 12
15:50 – 17:10	TC 08: Bioeffects/Medical Applications of EM (II)	TC 05: System Level Protection and Testing
Chair	Guirong Ding, Lars-Ole Fichte	Armin Kaelin, Nicolas Mora
15:50-16:10	TC08-5 Acute Hepatic Effects of Ka-HPM Pulses Exposure on KM Mouse (#76) Xiaoyun Lu, Haihui Yang, Fan Fan, Yi Zhou, Yangxin Qiu, Yanzhao Xie (Xi'an Jiaotong University).	TC05-1 Study of the Electromagnetic Protection of Infrastructures with Alternative Shielding Strategies (#16) Nicolas Mora, Zhaoyang Wang (EMC Laboratory, Swiss Federal institute of Technology, EPFL), Carlos Romero, Markus Nyffeler (Armasuisse Science and Technology), Farhad Rachidi (EMC Laboratory, Swiss Federal Institute of Technology, EPFL).
16:10-16:30	TC08-6 Investigation of Gene Expression Alterations in Human Peripheral Blood Cells After Continuous Wave Exposure at 900 MHz (#100) Fichte Lars Ole (HSU).	TC05-2 Medium-voltage Transformers Under EMP-Conditions (#93) (BPA finalist) Armin W. Kaelin (EMProtec AG), Markus Nyffeler, Carlos Romero (Armasuisse Science and Technology).
16:30-16:50	TC08-7 (original from TC4) A Systematic Electromagnetic Protection System Based on Human Immune Mechanism (#137) Yaohui Zhang, Yuebo Li, Jie Yang (Institute of Defense Engineering).	TC05-3 Effect of Penetrating Conductors on Shielding Effectiveness of Metallic Enclosures (#131) Zhaoyang Wang, Nicolas Mora (EMC Laboratory, Swiss Federal Institute of Technology, EPFL), Carlos Romero, Markus Nyffeler (Armasuisse Science and Technology), Farhad Rachidi (EMC Laboratory, Swiss Federal Institute of Technology, EPFL).
16:50-17:10	TC08-8 (original from SS04) Improved Model of Deep Transcranial Magnetic Stimulation with Temporal Interference (#141) DongXu Shi, XiLe Wei, Jiang Wang, Bin Deng.	TC05-4 (original from TC16) HF Radio E1 HEMP Protection Using Gas Discharge Tube Surge Protectors (#77) Edward Savage, William Radasky (Metatech Corporation).



Wednesday,2019/09/18	Room: Function 2	Room: Function 3
14:00 – 15:40	SS 06: Influence of Geomagnetic Disturbance on Infrastructures	TC 02: Coupling/Structures/Cables
Chair	Chunming Liu, Edward Savage	Dave Giri, Lihua Shi
14:00-14:20	SS06-1 Effects of GIC on Winding Currents of Single Phase UHV Autotransformer with Load (#34) Bing Li, Zezhong Wang, Mingyang Li, Ke Liu, Mengzhen Xuan, Suxin Guo (North China Electric Power University).	TC02-1 Research on Interference and Damage of Mesoband EMP Irradiation in System-Level UAV (#23) (BSPA finalist) Jiangnan Zhang, Yong He, Xuchao Pan, Zhijun Qiao, Jie Shen, Ziqi Yang (Nanjing University of Science and Technology).
14:20-14:40	SS06-2 Study on the Influence of Earth Current “Pipeline Effect” on PSP of Pipelines (#108) (BSPA finalist) WEIFENG ZHAI, ZHISHAN LIANG (China University of Petroleum (Beijing)).	TC02-2 Coupling Characteristics Analysis of Low-altitude Targets over Half Space under HPEM Environments (#31) Aote Zhang, Le Cao, Yuanguo Zhou (Xi'an University of Science and Technology).
14:40-15:00	SS06-3 Unified Mechanism of Geo-magnetic Storm and Sub-storm (#112) Zhishan Liang (China University of Petroleum Beijing).	TC02-3 Circuit Modeling of Capacitive and Inductive Couplers of Pulsed Current Injection Tests (#42) Yi Zhou, Yan-zhao Xie, Dao-zhong Zhang (Xi'an Jiaotong University).
15:00-15:20	SS06-4 (FROM TC13-3) Geomagnetic Storms and Electric Power Grid Issues (#78) Edward Savage, William Radasky (Metatech Corporation).	TC02-4 Simulation Study on Lightning Indirect Effect of Metal Cylinder (#45) Ruitao Huang, Yantao Duan, Lihua Shi.
15:20-15:40	SS06-5 Steady-state Security Region of Power System Based on Hyper-plane Under the Influence of Geomagnetic Storms (#134) Xinjie Li, Chunming Liu (North China Electric Power University).	TC02-5 Simulation Evaluation of the Coupling Effect of Cables Crossing Cabins in Frequency Domain (#96) (BPA finalist) GuoShuai Zhen, JiaZuo Zang, XueFeng Qi, Yan Wang (Aviation Key Laboratory of Science and Technology on Electromagnetic Environmental Effects Shenyang Aircraft Design and Research Institute, AVIC).



Wednesday, 2019/09/18	Room: Function 11	Room: Function 12
14:00 – 15:40	TC 16: Design of Protective Devices and Test Methods	SS 04: Toward Deep Transcranial Magnetic Stimulation
Chair	Jie Guo, Armin Kaelin	Mai Lu, Lars-Ole Fichte
14:00-14:20	TC16-1 How to Test a Microcontroller for Immunity to HPEMP Influence? (#6) Vladimir M Chepelev, Yury V. Parfenov (Joint Institute for High TEMPeratures Russian Academy of Sciences), Yu-hao Chen, Yan-zhao Xie (Xi'an Jiaotong University).	SS04-1 Optimizing the Positioning of the Coil for Deeper Transcranial Magnetic Stimulation (#30) Lei Yang, Chang Liu, Tongning Wu (China Academy of Information and Communications Technology).
14:20-14:40	TC16-2 EMP Protection Method for Communication RF Front-end (#20) Yuming Wang, Zhaoxiang Meng, Liyun Ma.	SS04-2 Deep Transcranial Magnetic Stimulation Using Different Coil Configurations (#86) Mai Lu (Lanzhou Jiaotong University), Shoogo Ueno (Kyushu University).
14:40-15:00	TC16-3 Analysis of Active Surge Protection Gap Impulse Breakdown Voltage (#40) Yangjing Le, Xueling Yao, Jinru Sun, Tianquan Li, Wenjun Xu, Jingliang Chen (Xi'an Jiaotong University).	SS04-3 Achieving Deep Transcranial Magnetic Stimulation by Activating a White Matter Fiber Tract (#133) Guanghao Zhang, Xiaolin Huo (Institute of Electrical Engineering, Chinese Academy of Sciences).
15:00-15:20	TC16-4 Refining HEMP Filter Design to Meet Changing PCI Requirements (#68) John Lindsay (MPE Ltd), David Rimmer (MPE Ltd).	SS04-4 The Computational Model of Deep Transcranial Magnetic Stimulation and Induced Electric Field Optimization (#139) YuQiao LI, Jiang Wang, XiLe Wei, Bin Deng (Tianjin University).
15:20-15:40	TC16-5 Study on Shielding Effectiveness Measurement Method of Concrete for RF Shield (#84) Hong-Je Jang, Tae-Seung Song, Hyo-Sik Choi (Korea Testing Laboratory), Sung-Wook Kim, Nam-Kon Lee (Korea Institute of Civil Engineering and Building Technology).	SS04-5 Modeling Subject-Specific Head Model: Application to Calculation of Induce Electric Fields by Transcranial Magnetic Stimulation (#140) Lin Lin, Jiang Wang, XiLe Wei, Bin Deng (Tianjin University).



Thursday,2019/09/19	Function 2	Room: Function 12
08:30 – 9:50	TC 04: IEMI Threats/Effects/Protection	TC 03: Meas. Techniques (I)
Chair	Jun Guo, Bill Radasky	Lihua Shi, Jae Wook Lee
8:30-8:50	TC04-1 Analysis of Destruction Characteristic of Bipolar Junction Transistor by Repetitive Pulse Injection (#80) Jeong-Ju Bang, Chang-Su Huh (Inha University).	TC03-1 Short-pulse HPM Measurements Using a Resistive Sensor (#54) Paulius Ragulis, Rimantas Simniškis, Mindaugas Dagys, Žilvinas Kancleris (Center for Physical Sciences and Technology), Dmitrii andreev, Antonio Alleluia, Edl Schamiloglu (University of New Mexico).
8:50-9:10	TC04-2 EM Failures Analysis of Analogue and Digital Sensors from a Safety and Security Perspective (#135) (BPA finalist) Chaouki KASMI (Xen1thLabs), Fahad Al Yafei (Tawazun).	TC03-2 A Measure System for Detonation-Generated Plasma Density (#43) (BSPA finalist) Ziqi Yang, Yong He, Xuchao Pan, Hong Chen, Jiangnan Zhang, Yu Zhou (Nanjing University of Science and Technology).
9:10-9:30	TC04-3 Coupling Path Visualization for Automotive Intentional Electromagnetic Interference (#29) (BSPA finalist) Yang Zhong, Woncheol Song (Missouri University of Science and Technology), Cheolhan Kim (Hyundai Motor Company), Changyul Park (Korean Testing Laboratory), Chulsoon Hwang Missouri (University of Science and Technology).	TC03-3 Optimization of Double-Frequency Test Technique for Nonlinear Characteristics (#46) Chen Pang, Zhiyong Yu, Wenzhan Du.
9:30-9:50	TC04-4 Effect of Ground on Wide-band High Power Microwave Testing (#52) Cai Jinliang, Qin Feng, Fan Jun, Yan Zhiyang (Key Laboratory of Science and Technology on Complex Electromagnetic Environment, CAEP).	TC03-4 PCI Test on Power Line Filter Against HEMP (#47) Hanming Cui, Zhewen Xu, Yantao Duan, Lihua Shi, Ke Wang (National Key Laboratory on Electromagnetic Environment Effects and Electro-Optical Engineering).



Thursday, 2019/09/19	Room: Function 11
08:30 – 9:50	TC 09: Antenna Design/Radiation (I)
Chair	Dave Giri, Sen Yan
8:30-8:50	TC09-1 A TEM Horn Array Fed by UWB Power Divider (#13) Sen Yan, Yan Zheng, Anxue Zhang (Xi'an Jiaotong University).
8:50-9:10	TC09-2 Realization of a Wide-band Rotationally Symmetric Antenna for Use in Reverberation Chambers (#14) Ronny Gunnarsson, Carl Samuelsson, Mats Bäckström (Saab Aeronautics).
9:10-9:30	TC09-3 Compariosn of Radiated Emissions in Offshore and Offshore Wind Turbine Towers (#124) (BPA finalist) Aravind Devaraj, Sajeesh Sulaiman, Aswin R (Siemens Gamesa Renewable Energy).
9:30-9:50	TC09-4 Compact Design of Novel Combined Antenna Array for the UWB Pulse Radiation (#127) Shao-fei Wang, Yan-zhao Xie (Xi'an Jiaotong University).



Thursday, 2019/09/19	Function 2	Room: Function 12
10:20 – 11:40	TC 04: IEMI Threats/Effects/Protection (II)	TC 03: Meas. Techniques (II)
Chair	Bill Radasky, Jun Guo	Jae Wook Lee, Lihua Shi
10:20 – 10:40	TC04-5 Review of High Intensity Radiated Field Simulation Methods (#50) Gao Yuan (Institute of Applied Electronics, CAEP).	TC03-5 Frequency-domain Calibration Method for D-dot Sensor (#8) (BSPA finalist) Ke Wang, Yantao Duan, Lihua Shi (National Key Laboratory on Electromagnetic Environment Effects and Electro-Optical Engineering).
10:40-11:00	TC04-6 The Threat of Electromagnetic Pulse and Countermeasures (#82) Wenjie Zhang, Guodong Song, Tao Zhang, Zhuo Liu, Jinrong Zhu, Yan Wang (Shenyang Aircraft Design and Research Institute).	TC03-6 Accumulative Effects of Multiple Pulse on Microcontroller (#64) Yinghui Zhou, Lihua Shi, Shangchen Fu (National Key Laboratory on Electromagnetic Environmental Effects and Electro-optical Engineering).
11:00-11:20	TC04-7 Analysis and Mitigation of Variable Frequency Drive Power Quality Problems (#122) Aswin R, Aravind Devaraj, Sajeesh Sulaiman (Siemens Gamesa Renewable Energy).	TC03-7 Study on the δ-Domain Model of Electromagnetic Pulse Test (#56) Rupo Ma (Jiangsu Police Institute), Lihua Shi (National Key Laboratory on Electromagnetic Environmental Effects and Electro-Optical Engineering), Jun Zhang (Jiangsu Police Institute).
11:20-11:40	TC04-8 Covert information Embedding in Remote Targets with HPEM (#71) (BPA finalist) José Lopes Esteves, Emmanuel Cottais (National Security Agency of France (ANSSI)).	TC03-8 Design and Test Verification of a Test Fixture for Field-to-line Coupling (#27) Longquan Zhong (Complicated Electromagnetic Environment Laboratory of CAEP).



Thursday, 2019/09/19	Room: Function 11
10:20 – 11:40	TC 18: Standards for HPEM Protection
Chair	Feng Qin, Dave Giri
10:20 – 10:40	TC18-1 Study on the Characterization of Shielding Effectiveness under Narrow Band High Power Microwave (#25) Zhiyang Yan, Feng Qin, Jinliang Cai (Key Laboratory of Science and Technology on Complex Electromagnetic Environment, CAEP).
10:40-11:00	TC18-2 HPEM Regulatory Standard (KinAC/RS-020) for IEMI Protection of Nuclear Facilities in ROK (#53) Jinho Ryu, Donghoon Song, Hojong Hwang, Sujin Park (Korea Institute of Nuclear Nonproliferation and Control).
11:00-11:20	TC18-3 Development of Antenna Waveforms for Updating IEC 61000-2-10 (#89) William Radasky (Metatech Corporation).
11:20-11:40	TC18-4 Design and Simulation of a 300kV Pulse Generator for a Bounded-wave Simulator (#90) Beizhen ZHANG, Falun Song, Yanqing Gan, Ping Xie, Fen Qin (Institute of Applied Electronics, CAEP).