

	<b>1P Poster Session Monday 5 June 1.00 - 3.00pm</b>			
	<b>1P1-5 Fusion ( Inertial, Magnetic and Alternate Concepts)</b>			
<b>Order</b>	<b>Title</b>	<b>Presenter</b>		<b>Authors</b>
1P1	A STUDY OF MULTISCALE DENSITY FLUCTUATIONS	Nils	Basse	Nils P Basse, ABB Switzerland Ltd.;
1P2	PLASMA START-UP USING TRANSIENT CHI ON NSTX	Dennis	Mueller	Dennis Mueller, Princeton Plasma Physics Laboratory;
1P3	SPACE POTENTIAL PROFILES IN RELATIVISTIC SPHERICAL INERTIAL ELECTROSTATIC CONFINEMENT (SIEC) DEVICES	Ryan	Meyer	Ryan M Meyer, University of Missouri-Columbia;
1P4	CONCAVE LIQUID METAL DIVERTOR FOR SPHERICAL TOKAMAKS	Isak	Konkashbaev	Isak Konkashbaev, Argonne National Laboratory;
1P5	D-D AND D-3HE PROTON MEASUREMENTS OF CYLINDRICAL RADIALLY CONVERGENT BEAM FUSION	Kunihito	Yamauchi	Sonoe Ohura, Dept. of Energy Sciences, Tokyo Institute of Technology; Akitoshi Okino, Dept. of Energy Sciences, Tokyo Institute of Technology; Masato Watanabe, Dept. of Energy Sciences, Tokyo Institute of Technology; Toshiyuki Kohno, Dept. of Energy Sciences, Tokyo Institute of Technology; Kunihito Yamauchi, Dept. of Energy Sciences, Tokyo Institute of Technology; Morimasa Yuura, Pulse Electronic Engineering Co.,Ltd.; Kei Nozaki, Dept. of Energy Sciences, Tokyo Institute of Technology; Eiki Hotta, Dept. of Energy Sciences, Tokyo Institute of Technology;
	<b>1P6-9 Ultrashort Pulse Lasers and Particle Acceleration</b>			
1P6	SELF-CONSISTENT HAMILTONIAN MODEL OF BEAM TRANSPORT IN A LASER-DRIVEN PLASMA ACCELERATOR	B	Shadwick	C B Schroeder, LOASIS Program, LBNL; B A Shadwick, LOASIS Program, LBNL and Institute for Advanced Physics; G M Tarkenton, Institute for Advanced Physics;
1P7	STUDY OF A HYDROGEN CAPILLARY DISCHARGE FOR PARTICLE ACCELERATION IN THE LOWER PRESSURE REGIME	Reda	Akdim	Reda Akdim, FOM-Institute for Plasma Physics Rijnhuizen;
1P8	HYADES MODELING OF ULTRAFAST LASER INTERACTIONS WITH MULTILAYER TARGETS	Michael	Grosskopf	Michael J Grosskopf, University of Michigan;
1P9	STUDY OF THE LASER PLASMA INTERACTION AND ENERGETIC ELECTRON BEAM PRODUCTION USING THE LSP CODE	Fei	He	Sergei Krasheninnikov, Center for Energy Research, UCSD; Beg Farhat, Center for Energy Research, UCSD; Mingsheng Wei, Center for Energy Research, UCSD; Fei He, Center for Energy Research, UCSD; Dale Welch, Voss Scientific; Richard Stephens, General Atomics;
	<b>1P10-20 Z-pinches and Radiation Sources</b>			
1P10	JET FORMATION IN LOW CURRENT X-PINCH DEVICES	Dmitry	Fedin	Dmitry A Fedin, University of California San Diego;
1P11	INVESTIGATION OF X-RAY EMISSION AS A FUNCTION OF WIRE NUMBER AND MATERIAL USING A COMPACT 80 KA CURRENT GENERATOR*	David	Haas	David M Haas, Mechanical and Aerospace Department, University of California San Diego;
1P12	X-RAY SPECTROSCOPY AND IMAGING OF COMBINED X-PINCHES WITH W WIRES AT UNIVERSITY-SCALE 1 MA PULSED POWER DEVICES	Alla	Safronova	Jonathan D Douglass, Cornell University; Vidya Nalajala, UNR; Ishor Shrestha, UNR; Andrey Esaulov, UNR; Dmitry Fedin, UNR; Travis Hoppe, UNR; Nicholas Quart, UNR; Fatih Yilmaz, UNR; Glenn Osborne, UNR; Victor Kantsyrev, UNR; David Hammer, Cornell University; John Apruzese, NRL; Alla Safronova, UNR; Ryan D McBride, Cornell University;
1P13	ANALYZING THE ENERGY SPECTRA OF ION BEAMS EMITTED FROM X-PINCH PLASMA	Xiaobing	Zou	Rui Liu, Department of Electrical Engineering, State Key Laboratory of Control and Simulation of Power System and Generation Equipment, Tsinghua University; Xiaobing Zou, Department of Electrical Engineering, State Key Laboratory of Control and Simulation of Power System and Generation Equipment, Tsinghua University;
1P14	STUDIES OF MULTIWIRE X PINCHES FROM 0.4 TO 1 MA	David	Hammer	David A Hammer, Cornell University;

1P15	X-PINCH PLASMA DYNAMICS OBSERVED WITH A SUB-200PS LASER	Marc	Mitchell	T.A. Shelkovenko, Laboratory of Plasma Studies, Cornell University; Marc D Mitchell, Laboratory of Plasma Studies, Cornell University; D.P. Jackson, Laboratory of Plasma Studies, Cornell University; K.M. Chandler, Laboratory of Plasma Studies, Cornell University; D.A. Hammer, Laboratory of Plasma Studies, Cornell University; I.C. Blesener, Laboratory of Plasma Studies, Cornell University; S.A. Pikuz, Laboratory of Plasma Studies, Cornell University;
1P16	DIRECT X-RAY STREAK CAMERA IMAGING OF MULTI-WIRE X-PINCHES	Katherine	Chandler	J. D. Douglass, Laboratory of Plasma Studies, Cornell University; S. A. Pikuz, Laboratory of Plasma Studies, Cornell University; Katherine M Chandler, Laboratory of Plasma Studies, Cornell University; D. A. Hammer, Laboratory of Plasma Studies, Cornell University; T. A. Shelkovenko, Laboratory of Plasma Studies, Cornell University; M. D. Mitchell, Laboratory of Plasma Studies, Cornell University;
1P17	DETERMINATION OF X-PINCH MICROPINCH PARAMETERS USING A SLIT-STEP-WEDGE CAMERA	Sergei	Pikuz	Sergei A Pikuz, Cornell University;
1P18	POSITIVE POLARITY EFFECT ON 8-WIRE CYLINDRICAL Z-PINCHES	David	Chalenski	Todd Blanchard, Cornell University; Bruce Kusse, Cornell University; Harry Wilhelm, Cornell University; David A Chalenski, Cornell University; John Greenly, Cornell University;
1P19	SINGLE AND MULTIPLE WIRE Z-PINCH EXPERIMENTS ON MARX-DRIVEN WATER-LINE PULSER	Trevor	Strickler	Yue Y Lau, University of Michigan; Ronald M Gilgenbach, University of Michigan; Matthew R Gomez, University of Michigan; Jacob Zier, University of Michigan; Thomas A Mehlhorn, Sandia National Laboratories; Michael E Cuneo, Sandia National Laboratories; M Mazarakis, Sandia National Laboratories; Mark D Johnston, Sandia National Laboratories; Trevor S Strickler, University of Michigan;
1P20	WIRE EXPLOSION STUDIES IN ARRAYS WITH SMALL NUMBERS OF WIRES USING A RANGE OF DISCHARGE PARAMETERS	Tatiana	Shelkovenko	Tatiana A Shelkovenko, P.N.Lebedev Physical Institute;
<b>1P21-28 High Energy Density Physics</b>				
1P21	MICRO- AND NANOSECOND TIME SCALE, HIGH POWER ELECTRICAL WIRE EXPLOSION IN WATER	Yakov	Krasik	Sergey Efimov, Physics Department, Technion; Arkady Sayapin, Physics Department, Technion; Alon Grinenko, Physics Department, Technion; Viktor Z Gurevich, Physics Department, Technion; Alexander Fedotov, Physics Department, Technion; Yakov E Krasik, Physics Department, Technion;
1P22	SPECT3D POST-PROCESSING OF LSP PIC SIMULATIONS: APPLICATION TO SHORT-PULSE LASER EXPERIMENTS	Joseph	MacFarlane	Igor E Golovkin, Prism Computational Sciences; Pamela R Woodruff, Prism Computational Sciences; Nicolas A Pereyra, Prism Computational Sciences; Roberto C Mancini, U. Nevada - Reno; Dale R Welch, Voss Scientific LLC; Richard J Town, Lawrence Livermore National Laboratory; Ping Wang, Prism Computational Sciences; Joseph J MacFarlane, Prism Computational Sciences;
1P23	COUPLING OF A TW-CLASS LASER WITH A TW PULSED POWER GENERATOR FOR HIGH ENERGY DENSITY PHYSICS EXPERIMENTS	Radu	Presura	A. L. Astanovitskiy, University of Nevada, Reno; M. Bakeman, University of Nevada, Reno; P. Laca, University of Nevada, Reno; B. Le Galloudec, University of Nevada, Reno; T. E. Cowan, University of Nevada, Reno; N. Le Galloudec, University of Nevada, Reno; V. V. Ivanov, University of Nevada, Reno; P. Wiewior, University of Nevada, Reno; Radu Presura, University of Nevada, Reno; P. Audebert, LULI, Ecole Polytechnique, France;
1P24	MEASUREMENT OF THE ELECTRON-ION THERMAL EQUILIBRATION RATE IN A STRONGLY COUPLED PLASMA	Jose	Taccetti	John F Benage, Los Alamos National Laboratory; Brendan R Haberle, Los Alamos National Laboratory; Jeff P Roberts, Los Alamos National Laboratory; Roger P Shurter, Los Alamos National Laboratory; Jose M Taccetti, Los Alamos National Laboratory;
1P25	THREE-DIMENSIONAL RAYLEIGH-TAYLOR INSTABILITY IN DECELERATING INTERFACE EXPERIMENTS	Carolyn	Kuranz	Carolyn C Kuranz, University of Michigan;
1P26	DESIGN OF RADIATIVE SHOCK TARGETS TO ENABLE IMPROVED DIAGNOSTIC ACCESS	Donna	Marion	Donna C Marion, University of Michigan ;

1P27	CONTROLLED FUSION BURNING AND CURRENT DRIVE IN A DEGENERATE PLASMA	Seunghyeon	Son	Nathaniel J Fisch, Department of Astrophysical Science, Princeton University ; Seunghyeon Son , Department of Astrophysical Science, Princeton University ;
1P28	COLLAPSING RADIATIVE SHOCK MEASUREMENTS IN XENON ON THE OMEGA LASER	Amy	Reighard	Amy B Reighard, University of Michigan;
	<b>1P29-43 Atmospheric-pressure Nonequilibrium Plasmas</b>			
1P29	PULSE OPERATED MULTI-GAS INDUCTIVELY COUPLED PLASMA SOURCE	Akitoshi	Okino	Kazuyasu Takimot, Department of Energy Sciences, Tokyo Institute of Technology; Masato Watanabe, Department of Energy Sciences, Tokyo Institute of Technology; Eiki Hotta, Department of Energy Sciences, Tokyo Institute of Technology; Akitoshi Okino, Department of Energy Sciences, Tokyo Institute of Technology; Taichi Kageyasu, Department of Energy Sciences, Tokyo Institute of Technology; Hidekazu Miyahara, Department of Energy Sciences, Tokyo Institute of Technology;
1P30	OBSERVATION OF VIRTUAL CAPACITANCE BETWEEN BARRIER DISCHARGE PLASMA AND DIELECTRIC ELECTRODE	Gon-Ho	Kim	Gon-Ho Kim, Professor;
1P31	DYNAMIC BEHAVIORS AND STABILITY OF ATMOSPHERIC GLOW PLASMAS AT 1 - 10 MHZ	Michael	Kong	Michael G Kong, Loughborough University, UK; Jian J Shi, Loughborough University; Da W Liu, Loughborough University;
1P32	THE EFFICIENT PLASMA PLUME EXTRACTION FROM ATMOSPHERIC PRESSURE PARALLAL DIELECTRIC BARRIER DISCHARGE JET	Joo Hyon	Noh	Joo Hyon Noh, Department of Metallurgical Engineering, Yonsei Univesity;
1P33	UNIFORM AND LONG-SLIT MICROWAVE PLASMA GENERATION FROM A LONGITUDINAL SECTION ELECTRIC MODE COUPLING	Hae Jin	Kim	Jin Joo Choi, Kwangwoon University; Hae Jin Kim, Kwangwoon University;
1P34	ROTATIONAL AND VIBRATIONAL TEMPERATURE MEASUREMENTS OF ATMOSPHERIC PRESSURE NORMAL GLOW PLASMA DISCHARGES IN AIR, NITROGEN, ARGON, AND HELIUM	David	Staack	David A Staack, Drexel University;
1P35	ELECTRON-BEAM PRODUCED AIR PLASMA: RF AND OPTICAL DIAGNOSTICS	Robert	Vidmar	Robert J Vidmar, University of Nevada, Reno;
1P36	IMPROVEMENT OF PLASMA UNIFORMITY USING ZNO-COATED DIELECTRIC BARRIER DISCHARGE IN OPEN AIR	Jai Hyuk	Choi	Jai Hyuk Choi, Department of Metallurgical Engineering, Yonsei University, Seoul, Korea;
1P37	EXPERIMENTAL COMPARISON OF ATMOSPHERIC PRESSURE PLASMA ACTUATOR GEOMETRIES	Alan	Hoskinson	Noah Hershkowitz, University of Wisconsin; Alan R Hoskinson, University of Wisconsin;
1P38	RADIAL VARIATION OF LASER-INDUCED AIR PLASMA PARAMETERS	Manny	Mathuthu	R ita M Raseleka, Tswane University of Science and Technology, Pretoria, South Africa; Nicholas West, University of Witswatersrand, Electrical and Information Engineering, ; Manny Mathuthu, University of Zimbabwe; Andrew Forbes, CSIR-National Laser Centre, Pretoria South Africa;
1P39	TIME-RESOLVED MEASUREMENTS OF OH RADICALS IN PULSED BARRIER DISCHARGE	Koichi	YASUOKA	Takashi Yamaguchi, Tokyo Institute of Technology; Shozo Ishii, Tokyo Institute of Technology; Koichi YASUOKA, Tokyo Institute of Technology;
1P40	TEMPERATURE VERIFICATION OF THE COLD PLASMA JET GENERATED BY ATMOSPHERIC DIELECTRIC BARRIER CAPILLARY DISCHARGE	Jialiang	Zhang	Jialiang Zhang, The State Key Laboratory for Material Madofication, Dalian University of Technology;
1P41	A NOVEL COLD PLASMA JET GENERATOR BASED ON ATMOSPHERIC DIELECTRIC BARRIER CAPILLARY DISCHARGE	Jialiang	Zhang	Jialiang Zhang, The State Key Laboratory for Material Madofication, Dalian University of Technology;
1P42	THE INFLUENCE OF GAS FLOW TO MAINTAIN A UNIFORM DIELECTRIC BARRIER DISCHARGE AT ONE ATMOSPHERIC PRESSURE	zhi	Cao	zhi Cao, Tsinghua University;
1P43	CHARATERIZATION OF MAGNETICALLY STABILIZED GLIDING ARC FOR STUDY OF FLAME IGNITION AND STABILIZATION	Shailesh	Gangoli	Timothy Ombrello, Princeton University; Shailesh P Gangoli, Drexel Plasma Institute; Alexander Fridman, Drexel Plasma Institute; Xiao Qin, Princeton University; Alexander Gutsol, Drexel Plasma Institute; Yiguang Ju, Princeton University;
	<b>1P44-56 Low-pressure Nonequilibrium Plasma Processing</b>			
1P44	CATHODE SPOT OF LOW PRESSURE ARC	Atsushi	Sato	Atsushi Sato, Musashi insitute of technology ;

1P45	CHARACTERISTICS OF MULTI GUN MGO PHYSICAL VAPOR DEPOSITION SYSTEM	Yong Sup	CHOI	Yong Sup - CHOI, Production Eng. Research Lab Samsung SDI Co. Ltd; Jinpil KIM, Production Eng. Research Lab Samsung SDI Co. Ltd; Seok Heon JEONG, Production Eng. Research Lab Samsung SDI Co. Ltd; KANGIL LEE, Production Eng. Research Lab Samsung SDI Co. Ltd;
1P46	ELECTRICAL FIELD MEASUREMENTS IN NON-EQUILIBRIUM LASER-GENERATED PLASMAS	Luigi	Celona	Luigi Celona, Istituto Nazionale di Fisica Nucleare - Laboratori Nazionali del Sud; Daniele Margarone, Università di Messina - Dipartimento di fisica; Santo Gammino, Istituto Nazionale di Fisica Nucleare - Laboratori Nazionali del Sud; Lorenzo Torrisi, Istituto Nazionale di Fisica Nucleare - Laboratori Nazionali del Sud; Università di Messina - Dipartimento di fisica;
1P47	HAFNIUM OXIDE PRODUCTION VIA LASER ABLATION PLASMA DEPOSITION	Ron	Gilgenbach	Nicholas M Jordan, Nuclear Engineering and Radiological Sciences, University of Michigan; Michael C Jones, Sandia National Labs; Yue Y Lau, Nuclear Engineering and Radiological Sciences, University of Michigan; Sha Zhu, Nuclear Engineering and Radiological Sciences, University of Michigan; Lumin M Wang, Nuclear Engineering and Radiological Sciences, University of Michigan; Michael Atzmon, Nuclear Engineering and Radiological Sciences, University of Michigan; Ron M Gilgenbach, Nuclear Engineering and Radiological Sciences, University of Michigan;
1P48	IMPACT OF TARGET GEOMETRY ON DEPOSITION UNIFORMITY IN IPVD SYSTEM	Jozef	Brcka	Jozef Brcka, TEL Technology Center, America, LLC;
1P49	WAFER REDEPOSITION IMPACT ON ETCH RATE UNIFORMITY IN IPVD SYSTEM	Jozef	Brcka	Rodney L. Robison, TEL Technology Center, America, LLC; Jozef Brcka, TEL Technology Center, America, LLC;
1P50	MEASUREMENT OF ION CURRENT ON TARGET BIASED WITH A HIGH NEGATIVE VOLTAGE	Jae-Myung	Choe	Jae-Myung Choe, MS Candidate;
1P51	PLASMA-MODIFIED INTERLAYERS APPLIED TO PROCESSING OF POLYMER ELECTRONIC MATERIALS	Patrick	Pedrow	Shane R Freepons, Washington State University; Samira Sharmin, Washington State University; Patrick D Pedrow, School of EECS;
1P52	SELF-ASSEMBLED NANOPATTERNS OF PLASMA-GROWN NANOPARTICLES	Kostya	Ostrikov	Kostya Ostrikov, School of Physics;
1P53	SINGLE VS. DUAL ION BEAM GROWTH OF CNX	William	Lanter	William C Lanter, Innovative Scientific Solutions, Inc.; Boyd A Tolson, Innovative Scientific Solutions, Inc.; David C Ingram, Ohio University; Charles A DeJoseph, Jr., AFRL/PRPE Wright-Patterson AFB;
1P54	ETCHING MECHANISMS OF PPS POLYMER WITH OXYGEN RADICALS	Uros	Cvelbar	Uros Cvelbar, Dr;
1P55	METHANE CONVERSION TO C2 HYDROCARBONS USING GLOW DISCHARGE PLASMA	Jie-rong	Chen	Jie-rong Chen , major author; Chun-ye Liu, Student Environment &Chemical Engineering institute, Xi'an Jiaotong University;; Miao Hu, Student Environment &Chemical Engineering institute, Xi'an Jiaotong University;; Zhi-guo Lu, Professor Physical Department, Northwest University;
1P56	LIF MEASUREMENT OF NITROGEN METASTABLE MOLECULAR STATE IN A COMPACT HELICON PLASMA SOURCE	Zane	Harvey	Costel Biloiu, WVU Dept. of Physics; Earl Scime, WVU Dept. of Physics; Zane W Harvey, West Virginia University Department of Physics;
	<b>1P57-62 High Pressure and Thermal Plasma Processing</b>			
1P57	DEVELOPMENT OF 300KW TWIN TORCH PLASMA ARC FURNACE FOR MEDICAL WASTE TREATMENT	TORU	IWAO	Hideo Nishiwaki, Sinwa Co., Inc.; TORU IWAO, Musashi Institute of Technology; Tsuginori Inaba, Chuo University; Motoshige Yumoto, Musashi Institute of Technology;
1P58	EVAPORATION RECOIL FORCE DURING PLASMA ARC SPRAYING	Valerian	Nemchinsky	Valerian Nemchinsky, ESAB Welding and Cutting Products;
1P59	THERMAL INTERRUPTION PERFORMANCE AND FLUCTUATIONS IN HIGH VOLTAGE GAS CIRCUIT BREAKERS	Nils	Basse	Nils P Basse, ABB Switzerland Ltd.; Torsten Votteler, ABB Switzerland Ltd.; Christian M Franck, ABB Switzerland Ltd.; Martin Seeger, ABB Switzerland Ltd.;
1P60	MEASUREMENT OF ELECTROMAGNETIC FIELD IN A RADIO FREQUENCY INDUCTIVELY COUPLED PLASMA AT ATMOSPHERIC PRESSURE	M.	Razzak	Yoshihiko Uesugi, Kanazawa University, Japan; M. A. Razzak, Nagoya University, Japan; Noriyasu Ohno, EcoTopia Science Institute, Nagoya University, Japan; Shuichi Takamura, Nagoya University, Japan;
1P61	A NEW METHOD OF EFFECTIVE CURRENT DENSITY DETERMINATION IN COLD ELECTRODE ARC SPOT	Dzmitry	Bubliyeuski	Dzmitry Bubliyeuski, UNICAMP, IFGW, DEQ;

1P62	ELECTRODE ANGLE FOR HIGH EFFICIENT WASTE TREATMENT BY TWIN TORCH PLASMA ARC	Yoshihito	Hayashi	Toru Iwao, T. Iwao; Yoshihito Hayashi, Musashi Institute of Technology;
	<b>1P63-66 Plasma Thrusters</b>			
1P63	EXPERIMENTAL AND COMPUTER SIMULATION STUDIES OF A PULSED PLASMA ACCELERATOR	Trevor	Moeller	Dennis Keefer, University of Tennessee Space Institute; Trevor Moeller, University of Tennessee Space Institute; Robert Rhodes, University of Tennessee Space Institute; Charles Merkle, Purdue University; Ding Li, Purdue University;
1P64	PLASMA EXPANSION IN A PARAXIAL MAGNETIC NOZZLE	Christopher	Deline	Christopher A Deline, University of Michigan;
1P65	AERODYNAMIC NOISE CONTROL BY ATMOSPHERIC PRESSURE GLOW DISCHARGE PLASMA	Nozomi	Takeuchi	Nozomi Takeuchi, Tokyo Institute of Technology;
1P66	A STUDY OF PARTICLE EMISSION FROM A RADIO FREQUENCY DRIVEN FERROELECTRIC PLASMA THRUSTER	Mark	Kemp	Scott D. Kovaleski, University of Missouri-Columbia; Mark A Kemp, University of Missouri-Columbia;
	<b>1P67-74 Basic Phenomena</b>			
1P67	TIME RESOLVED EEDF INVESTIGATION FOR PLASMA HEATING	ShinJae	You	Sungku Ahn, KAIST; Sungsik Kim, KBSI; ShinJae You, KAIST;
1P68	DUST A CAUSTIC SURFACE WAVES ON A DUSTY MAGNETIZED PLASMA.	Atef	EL-Bendary	Atef EL-Bendary, Lecturer;
1P69	APPLICATION OF ATMOSPHERIC-PRESSURE NONEQUILIBRIUM PLASMA IN AIR DECONTAMINATION	SHU-MIN	YIN	SHU-MIN YIN, PlasmaSol Corp.;
1P70	THERMOELECTRIC POTENTIAL IN A WEAKLY-INHOMOGENEOUS COLLISIONLESS MAXWELLIAN PLASMA	Valentin	Rantsev-Kartinov	Valentin A Rantsev-Kartinov, NFI RRC "Kurchatov Institute";
1P71	TOROIDAL ELECTRON PLASMA: DESIGN, OPERATION AND DIAGNOSTICS IN SMARTEX	Sambaran	Pahari	Sambaran Pahari, Institute for Plasma Research,Gandhinagar,Gujarat,India; P I John, Institute for Plasma Research,Gandhinagar,Gujarat,India; H S Ramachandran, Indian Institute for Technology,Madras,India;
1P72	MEASUREMENTS ON AN ARGON HELICON PLASMA WITH VARIABLE MAGNETIC NOZZLE	Christopher	Denning	Christopher M Denning, University of Wisconsin-Madison;
1P73	AIR BREAKDOWN DYNAMICS OF PREFORMED AIR PLASMA CHANNELS	Harold	Ladouceur	Tzvetelina B Petrova, NRC-NRL; Harold D Ladouceur, Naval Research Laboratory;
1P74	IONIZATION EQUILIBRIUM IN MULTICHARGED ION PLASMA WITH FAST ELECTRONS	Vasily	Zakharov	Vasily S Zakharov, Keldysh Institute of Applied Mathematics;
	<b>1P75-79 Partially Ionized Plasmas</b>			
1P75	PARAMETRIC INVESTIGATION OF A MID FREQUENCY INTERNAL OSCILLATING CURRENTS DRIVEN PLASMA REACTOR	Ren	Yuping	Ren Yuping, National Institute of Education/Nanyang Technological University/Singapore;
1P76	A PRELIMINARY EXPERIMENT ON X-PINCH	Xinxin	Wang	Xinxin Wang, Department of Electrical Engineering, Tsinghua University;
1P77	SPATIOTEMPORAL EVOLUTION OF ELECTRON ENERGY DISTRIBUTION AND PLASMA PARAMETERS IN SHORT-PULSE MAGNETRON DISCHARGES	Sang-Hun	Seo	Sang-Hun Seo, Korea Advanced Institute of Science and Technology;
1P78	PLASMA-ENHANCED CHEMICAL VAPOR DEPOSITION OF INORGANIC COATINGS ON POLYMERIC MATERIALS USING ORGANIC PRECURSORS	Juan	Jiang	Juan Jiang, Nanon A/S;
1P79	MACROSCOPIC EMISSION NON-UNIFORMITY IN THERMIONIC CATHODES DUE TO PROFILIMETRY VARIATION	Kevin	Jensen	Kevin L. Jensen, Naval Research Laboratory;
	<b>1P80-87 Intense Electron and Ion Beams</b>			
1P80	PLASMA FORMATION IN THE IPNS RCS	Jeffrey	Dooling	Gerald E McMichael, Argonne National Laboratory; Jeffrey C Dooling, Argonne National Laboratory;
1P81	A MAGNETICALLY INSULATED TRANSMISSION LINE CONNECTED TO THE ASTERIX 6MV GENERATOR FOR X-RAYS DIODE RESEARCH	Christophe	Vermare	Christophe Vermare, CEA/DAM;
1P82	SPECTROSCOPIC INVESTIGATIONS OF GAS AND PLASMA-FILLED PARAXIAL DIODES FOR X-RAY RADIOGRAPHY	Mark	Johnston	Mark D Johnston, Sandia National Laboratories;

1P83	MULTI-DIMENSIONAL CHILD-LANGMUIR LAW FOR A CROSSED-FIELD GAP	Wee Shing	Koh	Lay Kee Ang, School of Electrical and Electronic Engineering, Nanyang Technological University; Xin Hua, School of Electrical and Electronic Engineering, Nanyang Technological University; Wee Shing Koh, School of Electrical and Electronic Engineering, Nanyang Technological University; Li Sun, School of Electrical and Electronic Engineering, Nanyang Technological University;
1P84	FINE SPATIAL SCALE SIMULATIONS OF RELATIVISTIC ELECTRON BEAM PENETRATION OF AN OVERDENSE PLASMA	Anthony	Sgro	Anthony G Sgro, Los Alamos National Lab;
1P85	PLASMA AND BEAM DYNAMICS IN SELF-MAGNETIC-PINCH ELECTRON BEAM DIODES	David	Rose	Thomas C Genoni, Voss Scientific, LLC; Dale R Welch, Voss Scientific, LLC; David V Rose, Voss Scientific, LLC; David Mosher, Naval Research Laboratory; David D Hinshelwood, Naval Research Laboratory; S Portillo, Sandia National Laboratories; Bryan V Oliver, Sandia National Laboratories; Jim Threadgold, AWE;
1P86	DESCRIPTION OF AN INTENSE ELECTRON BEAM DRIVEN BY CESAR A 700KV, 350 KA PULSED POWER GENERATOR	luc	VOISIN	Alain GALTIE, CEA CESTA; luc VOISIN, CEA CESTA; Patrick MODIN, CEA CESTA; Thierry DESANLIS, CEA CESTA; David HEBERT, CEA CESTA; Bruno CASSANY, CEA CESTA;
1P87	INFLUENCE OF DISSIPATION ON BEAM INSTABILITY OF NEGATIVE-MASS-TYPE IN NO-UNIFORM BEAM-PLASMA WAVEGUIDE	Eduard	Rostomyan	Eduard Rostomyan, Inst of Radiophysics & Electronics Armenian National Ac Sci;
<b>2P Poster Session Tuesday 6 June 1.00pm-3.00pm</b>				
<b>2P1-6 Optical Diagnostics</b>				
2P1	ION VELOCITY DISTRIBUTION FUNCTION MEASUREMENTS IN A HELIUM HELICON PLASMA	Earl	Scime	Earl E Scime, West Virginia University; Christopher Compton, WVU; Ioana Biloiu, WVU; Ryan Murphy, WVU;
2P2	DEVELOPMENT OF THE HIGH SENSITIVITY MULTI CHANNEL BULK ABSORPTION LASER CALORIMETER	Su	Chunxiao	Su Chunxiao, National Key Laboratory for Laser Fusion, Research Center of Laser Fusion, China Academy of Engineering Physics;
2P3	THE VALIDITY OF OES LINE-RATIO METHOD TO DETERMINE THE ELECTRON TEMPERATURE IN INDUCTIVELY COUPLED NITROGEN PLASMAS	Yi-Kang	Pu	Yi-Kang Pu, Department of Engineering Physics;
2P4	OPTICAL DIAGNOSTICS OF LASER INITIATED, RF SUSTAINED HIGH PRESSURE SEEDED PLASMAS*	Magesh	Thiyagarajan	Mark Denning, University of Wisconsin - Madison; Magesh Thiyagarajan, University of Wisconsin - Madison; John Scharer, University of Wisconsin - Madison; Siqi Luo, University of Wisconsin - Madison;
2P5	ELECTRON DENSITY MAPPING OF ATMOSPHERIC PRESSURE GLOW DISCHARGE IN AIR USING TWO-WAVELENGTH INTERFEROMETRY	Jerome	PONS	Jerome PONS, Old Dominion University;
2P6	QUANTITATIVE TWO DIMENSIONAL SHADOWGRAPHY FOR LOW DENSITY PLASMA CHARACTERIZATION	Stefano	Minardi	Stefano Minardi, Technological Educational Institute of Crete; Michael Tatarakis, Technological Educational Institute of Crete; Costas Petridis, Technological Educational Institute of Crete; Amrutha Gopal, Technological Educational Institute of Crete;
<b>2P7-9 Particle Diagnostics</b>				
2P7	NEW PROBE METHOD APPLICABLE TO PLASMA PROCESSING	ChinWook	Chung	ChinWook Chung, Dept. of Electrical and Control Engineering, HanYang Univ;
2P8	A NEUTRON STREAK CAMERA DESIGNED FOR ICF FUEL ION TEMPERATURE DIAGNOSTIC	Jiabin	Chen	Jiabin Chen, National Key Laboratory of Laser Fusion, Research Center of Laser Fusion, China Academy of Engineering Physics;
2P9	LEAD ACTIVATION NEUTRON YIELD MEASUREMENT SYSTEM USED IN ICF EXPERIMENT	Cunbang	Yang	Cunbang Yang, National Key Laboratory for Laser Fusion, Research Center of Laser Fusion, China Academy of Engineering Physics;
<b>2P10-13 X-ray Diagnostics</b>				
2P10	PERFORMANCE EVALUATION OF A MICROCHANNEL PLATE BASED X-RAY CAMERA WITH A REFLECTING GRID	Anthony	Visco	Anthony J Visco, University of Michigan;

2P11	SOFT X- RAY GENERATION USING CNT BASED LIQUID HYBRID TARGET	Haeyoung	Choi	J. U. Kim, Korea Electrotechnology Research Institute (KERI); H. S. Kim, Korea Electrotechnology Research Institute (KERI); Y. H. Park, Korea Electrotechnology Research Institute (KERI); W. S. Chang, Korea Electrotechnology Research Institute (KERI); Haeyoung Choi, Korea Electrotechnology Research Institute (KERI);
2P12	TIME RESOLVED SPOT SIZE MEASUREMENTS USING A SELF MAGNETIC PINCH DIODE ON EROS	Salvador	Portillo	Salvador Portillo, Sandia National Laboratories;
2P13	SPECTROSCOPIC MEASUREMENTS OF RECENT ALUMINUM WIRE ARRAY Z-PINCH IMPLOSIONS ON THE Z-ACCELERATOR	P. David	LePell	P. David LePell, Ktech Corporation;
	<b>2P14-24 Pulsed Power Technology and Other Applications</b>			
2P14	DESIGN AND DEVELOPMENT OF AN IMPULSE POWER SUPPLY FOR PULSED POWER APPLICATIONS	Rajendrasinh	Jadeja	Rajendrasinh Jadeja, C.U.Shah College Of Engg. & Tech.;
2P15	A HIGH REPETITION RATE MULTI-PULSE DISCHARGE POWER FOR HEATING PLASMA	Baocai	Jiang	Wenzheng Lin, Professor; Baocai Jiang, colleague;
2P16	PRELIMINARY INTERFEROMETRIC AND PROBE MEASUREMENTS ON A TRIGGERED PLASMA OPENING SWITCH SOURCE	Alan	Lynn	Robin A Sharpe, Sandia National Laboratories; Waylon T Clark, University of New Mexico; Mark A Gilmore, University of New Mexico; Naga Devarapalli, University of New Mexico; Mark E Savage, Sandia National Laboratories; Alan G Lynn, University of New Mexico;
2P17	POWER FLOW MODELING FOR RITS-6	Nichelle	Bruner	Nichelle L Bruner, Voss Scientific, LLC;
2P18	TESTS OF A PROTOTYPE GAS-SWITCHED 1.4 MV PULSE FORMING LINE	P	Corcoran	S Fishlock, AWE; I Smith, AWE; M Swierkosz, AWE; P Corcoran, L-3 Pulse Sciences; K Thomas, AWE; V Carboni, L-3 Pulse Sciences; J Kishi, L-3 Pulse Sciences; J Pearce, L-3 Pulse Sciences; I D Smith, L-3 Pulse Sciences; B Whitney, L-3 Pulse Sciences; R Broff, L-3 Pulse Sciences; K da Silva, L-3 Pulse Sciences; P Sanders, L-3 Pulse Sciences;
2P19	WATER FILM FOR PROTECTING INSULATOR SURFACE FROM LIGHTNING DISCHARGE	Koichi	Yasuoka	Shozo Ishii, Tokyo Institute of Technology; Naoki Nakagomi, Tokyo Institute of Technology; Koichi Yasuoka, Tokyo Institute of Technology;
2P20	FOIL COOLING FOR REP-RATED ELECTRON BEAM PUMPED KRF LASERS	John	Giuliani	P. Burns, Research Support Instruments; F. Hegeler, Commonwealth Technologies, Inc.; J. D. Sethian, Naval Research Laboratory; K. Schoonover, Georgia Institute of Technology; M. C. Myers, Naval Research Laboratory; John L. Giuliani, Naval Research Laboratory; D. Sadowski, Georgia Institute of Technology; S. Abdel-Khalik, Georgia Institute of Technology; M. F. Wolford, Naval Research Laboratory;
2P21	ANALYSIS OF NANOSECOND PULSED CORONA ON A TWO-WIRE TRANSMISSION LINE USING THE METHOD OF Q-V CURVES	Noaz	Nissim	Noaz Nissim, Propulsion Physics Laboratory, Soreq NRC;
2P22	ARC DISCHARGE IN WATER TO REMOVE ALGAE AND RED TIDE IN MERECAST	Young-Ho	Na	Young-Ho Na, Institute for Advanced Engineering; Sang-Sik Kim, Institute for Advanced Engineering;
2P23	CHARACTERISTICS OF PLASMA NEAR THE TARGET BIASED WITH A HIGH NEGATIVE PULSE	Jae-Myung	Choe	Jae-Myung Choe, M.S. Candidate;
2P24	DESIGN AND OPTIMIZATION OF A LOW-IMPEDANCE PULSED POWER MARX GENERATOR TO DRIVE A RELATIVISTIC X-BAND MAGNETRON	Edl	Schamiloglu	Mike Abney, University of New Mexico; Mikhail Fuks, University of New Mexico; Edl Schamiloglu, University of New Mexico; Ken Prestwich, Ken Prestwich Consulting; Marvin Roybal, University of New Mexico; John Gaudet, University of New Mexico; Jerald Buchenauer, University of New Mexico; Sarita Prasad, University of New Mexico;
	<b>2P25-26 Pulsed Power Switching</b>			
2P25	RESISTANCE OF A WATER SWITCH	Jane	Lehr	Jane M. Lehr, Sandia National Laboratories;
2P26	INVESTIGATION OF CAUSES LEADING TO DIELECTRIC FLASHOVER IN A LASER TRIGGERED GAS SWITCH	Scott	Kovaleski	Randy Curry, University of Missouri - Columbia; Andrew L Benwell, University of Missouri - Columbia; John Gahl, University of Missouri - Columbia; Chris Yeckel, University of Missouri - Columbia; Darrin Swarts, University of Missouri - Columbia; Scott D Kovaleski, University of Missouri - Columbia;

	<b>2P27-41 Atmospheric-pressure Nonequilibrium Plasmas</b>			
2P27	THE RESEARCH ON ATMOSPHERIC PRESSURE GLOW-LIKE DISCHARGE PLASMA	Zhijie	Zhu	Zhijie Zhu, Department of Electrical Engineering, Tsinghua University, Beijing;
2P28	COMPLEX DYNAMIC BEHAVIORS OF NON-EQUILIBRIUM ATMOSPHERIC DIELECTRIC BARRIER DISCHARGES	Dezhen	Wang	Dezhen Wang, Dalian University of Technology, P R China;
2P29	INFLUENCE OF DIELECTRIC AND ELECTRODE ON DBD AT ATMOSPHERIC PRESSURE	Xinxin	wang	Xinxin wang, Department of Electrical Engineering, Tsinghua University;
2P30	CHARACTERISTICS OF AN ATMOSPHERIC PRESSURE LOW TEMPERATURE DISCHARGE PRODUCED FOR 3-D SURFACE TREATMENTS	Wonho	Choe	Wonho Choe, Department of Physics, Korea Advanced Institute of Science and Technology;
2P31	ADHESION ENHANCEMENT OF POLYMER-COATED TIN PLATE USING ATMOSPHERIC PLASMA TREATMENT	Jong Pil	Jegal	Jong Pil Jegal, Department of metallurgical engineering, yonsei university;
2P32	APPLICATION OF ATMOSPHERIC AIR PLASMA FOR POLYETHYLENE POWDER MODIFICATION	Vladimir	Scholtz	Vladimir Scholtz, CTU FEE;
2P33	DISCHARGE PROPERTIES OF PREFORMED AIR PLASMA CHANNELS	Harold	Ladouceur	Harold D. Ladouceur, Naval Research Laboratory;
2P34	LARGE AREA SILICON DIOXIDE DEPOSITION USING RF ATMOSPHERIC PRESSURE GLOW DISCHARGE AT LOW TEMPERATURE	Man Hyeop	Han	Man Hyeop Han, Department of Metallurgical Engineering, Yonsei University, Korea;
2P35	THE PLASMA PENCIL: A NOVEL COLD PLASMA SOURCE FOR LOW TEMPERATURE APPLICATIONS	Mounir	Laroussi	Mounir Laroussi, Old Dominion University; Xinpei Lu, Old Dominion University; Claire Tendero, Old Dominion University;
2P36	SURFACE ENERGY ENHANCEMENT OF BULK PLASTICS USING THE ONE ATMOSPHERE UNIFORM GLOW DISCHARGE PLASMA (OAugDP)	Xin	Dai	Sirous Nourgostar, The University of Tennessee, Knoxville; Xin Dai, The University of Tennessee, Knoxville;
2P37	MEASUREMENTS OF PLASMA TEMPERATURES IN H <sub>2</sub> /CARBON/AR MICROWAVE PLASMA BY UV EMISSION SPECTROSCOPY	Yongho	Kim	Yongho Kim, Los Alamos National Laboratory;
2P38	PLASMA-ASSISTED COMBUSTION IN A MINIATURE MICROWAVE PLASMA TORCH APPLICATOR	Kadek	Hemawan	Kadek W Hemawan, Michigan State University and Fraunhofer CCL; Chandra L Romel, Michigan State University;
2P39	HIGH POWER - POSITIVE PULSED CORONA DISCHARGE SYSTEMS FOR VOLATILE	giyoung	tak	Alexander Fridman, Plasma Institute of Drexel University; Alexander Gutsol, Plasma Institute of Drexel University; giyoung tak, Plasma Institute of Drexel University;
2P40	ATMOSPHERIC CONTINUOUS FILAMENT DISCHARGE PLASMA (ACFDP) APPLIED TO CROP STERILIZATION	Liang	Liu	Liang Liu, Department of Electrical Engineering, Tsinghua University, Beijing, PRC;
2P41	RF ATMOSPHERIC PLASMA SYSTEMS FOR DEPOSITION OF NANOSTRUCTURES	Ahmed	Hassanein	Ahmed M Hassanein, Argonne National Laboratory;
	<b>2P42-53 Plasmas for Lighting</b>			
2P42	DIELECTRIC BARRIER DISCHARGE IN NITROGEN AND ARGON	Zhan	Huamao	Zhan Huamao, North China Electric Power University;
2P43	SPECTRAL INTENSITIES AS A FUNCTION OF HG CONTENT AND MEASUREMENT POSITION IN FLORESCENT LIGHT TUBES	Zissis	Georges	Zissis Georges, Plasma for lighting;
2P44	BRIGHTNESS CHARACTERISTICS FOR THE INPUT FREQUENCY OF AN LARGE SIZE EXTERNAL ELECTRODE FLUORESCENT LAMP (EEFL)	Seong-Jin	Lee	Jong-Chan Lee, Kumho Electric inc.; Dae-Hee Park, Wonkwang University; Yong-Sung Choi, Dongshin University; Seong-Jin Lee, Wonkwang University;
2P45	TIME DEPENDENT MODELING OF THE ELECTRODE REGION OF A FLUORESCENT LAMP DISCHARGE	Richard	Garner	Richard C Garner, Osram Sylvania, Inc.;
2P46	A STUDY ON THE RELATIONSHIP BETWEEN ELECTRODE MATERIALS AND CHARACTERISTICS OF CCFL'S NEGATIVE GLOW PLASMA	Tadao	Uetsuki	Tadao Uetsuki, Tsuyama National College of Thechnology; Ryota Kitamoto, Tsuyama National College of Thechnology; Yuji Takeda, Harison Toshiba Lighting Corp.; Osamu Fukumasa, Yamaguchi University;
2P47	NEW MIXTURE FOR AC DRIVING LOW PRESSURE XE LAMP	Ki Wan	Park	Ki Wan Park, Department of Metallurgical system engineering, Yonsei Un;
2P48	INFLUENCE OF PRESSURE ON PERFORMANCES OF MERCURY FREE SIGNS EXCITED WITH A PULSED POWER SUPPLY	Sébastien	Point	Sébastien Point, GREMI-Polytech'Orleans;
2P49	THE DISCHARGE PROPERTIES OF XE TYPE FLAT BY GAS PRESSURE	YANG	JONG KYUNG	YANG JONG KYUNG
2P50	LOWERING THE IGNITION VOLTAGE	TAE IL	LEE	TAE IL LEE, Department of Metallurgical Engineering, Yonsei Univ.;

2P51	LARGE AREA XENON EXCIMER LAMP USING FLOATING ELECTODE IN DIELECTRIC BARRIER DISCHARGE	Hyeon Seok	Hwang	Hyeon Seok Hwang, Yonsei Univ.;
2P52	SELF-ORGANIZED PATTERNS IN CATHODE BOUNDARY LAYER DISCHARGES	Nobuhiko	Takano	Karl Heinz Schoenbach, Frank Reidy Research Center for Bioelectronics; Nobuhiko Takano, Frank Reidy Research Center for Bioelectronics;
2P53	NET EMISSION COEFFICIENT EMITTED FROM HIGH TEMPERATURE ARGON-IRON AND ARGON-MERCURY GASES	Takuro	Miyajima	Takuro Miyajima, Musashi Institute of Technology;
	<b>2P54 Microplasmas and Flat-panel Displays</b>			
2P54	LOCAL AREA MATERIALS ETCHING USING MICROSTRIPLINE-BASED MINIATURE MICROWAVE DISCHARGE	Jeffri	Narendra	Jeffri J. Narendra, Michigan State University;
	<b>2P55-69 Medical, Biological and Environmental Applications</b>			
2P55	VOLTAGE AND TEMPERATURE EFFECTS OF DENOX IN DBD PLASMA GENERATED BY AN INTERMITTENT POWER SOURCE	Ken	Yukimura	Ken Yukimura, Deaprtment of Electrical Engineering, Doshisha University;
2P56	BIOFILM DESTRUCTION BY HE-O2 RF HIGH-PRESSURE COLD PLASMA JET	Nina	Abramzon	Graciela Brelles-Marino, Biological Sciences Department, California State Polytechnic University; Jonathan Bray, Aerospace Engineering Department ,California State Polytechnic University; Nina Abramzon, Physics department. California State Polytechnic University; Jonathan C Joaquin, Biological Sciences Department, California State Polytechnic University;
2P57	STUDY OF BACTERICIDAL EFFECTS OF CORONA DISCHARGE AT ATMOSPHERIC PRESSURE ON VARIOUS BACTERIA	Vladimir	Scholtz	Vitezslav Kriha, CTU in Prague, Czech Republic; Jaroslav Julak, Charles University, Prague, Czech Republic; Vladimir Scholtz, CTU in Prague, Czech Republic;
2P58	SOIL TREATMENT USING OZONE AND NITRIC MONOXIDE PRODUCED BY PULSED DISCHARGE	Tomoaki	Ikegami	Kazuhiko Nagira, Dojin Glocal Corp.; Toshinori Kai, Dojin Glocal Corp.; Tomoaki Ikegami, Kumamoto University; Kenji Ebihara, Kumamoto University; Kouichi Ogata, Kumamoto University;
2P59	DEVELOPMENT OF A PULSED POWER GENERATOR AND ITS EMTP SIMULATION	Jaegu	Choi	Jaegu Choi, Kumamoto University;
2P60	TREATMENT OF VOLATILE ORGANIC COMPOUNDS USING SECONDARY EMISSION ELECTRON GUN	Masato	Watanabe	Eiki Hotta, Tokyo Institute of Technology; Asuna Fukamachi, Tokyo Institute of Technology; Kwang-Cheol Ko, Hanyang University; Masato Watanabe, Tokyo Institute of Technology; Akitoshi Okino, Tokyo Institute of Technology;
2P61	PROPOSAL OF SIMULTANEOUS DECOMPOSITION OF DIESEL PARTICULATE MATERIAL AND NITRIC OXIDE USING DIELECTRIC BARRIER DISCHARGE	YUKIHIKO	YAMAGATA	YUKIHIKO YAMAGATA, Interdisciplinary Graduate School of Engineering Sciences, Kyushu University;
2P62	OPTIMIZATION OF AN ATMOSPHERIC PRESSURE DIRECT-CONTACT DBD FOR THE TREATMENT OF AQUEOUS PHARMACEUTICAL SOLUTIONS	Joelle	Jureidini	Joelle Jureidini, Department of Chemical Engineering, McGill University; Sylvain Coulombe, Department of Chemical Engineering, McGill University;
2P63	NANO-PARTICLE AND NANO-PHASE NETWORK STRUCTURE IN FECO THIN FILM USING PLASMA FOCUS	Tao	Zhang	Tao Zhang, National Institute of Education;
2P64	PLASMA MELTING OF INCINERATION ASHES	H. Paul	Wang	Shan-Hwei Ou, Department of Hydraulic and Oceanic Engineering, National Cheng Kung University; Juu-En Chang, Department of Environmental Engineering, National Cheng Kung University; Yeu-Juin Tuan, Department of Environmental Engineering, National Cheng Kung University; H. Paul Wang, Department of Environmental Engineering, National Cheng Kung University;
2P65	IMPROVEMENT OF ENERGY EFFICIENCY BY DYNAMIC FLOW OF NO AND RADICALS IN AMMONIA RADICAL INJECTION USING AN INTERMITTENT DBD DENOX SYSTEM	Ken	Yukimura	Hiroshi Moritomi, Gifu University; Shin-nosuke Totamoto, Gifu University; Shinji Kambara, Gifu University; Yuta Kumano, Gifu University; Ken Yukimura, Doshisha University;
2P66	STUDY OF SO2 REMOVAL USING NON-THERMAL PLASMA INDUCED BY CORONA DISCHARGE	Limin	Dong	Limin Dong, Harbin University of Science and Technology;
2P67	ENGINE-EXHAUST ABATEMENT USING ATMOSPHERIC PRESSURE PLASMA	Ashish	Sharma	Ashish Sharma, Colorado State University; George J Collins, Colorado State University; Azer Yalin Yalin, Colorado State University; Cameron Moore Moore, Colorado State University; Jason S Komorowski, Colorado State University;

2P68	PULSED ELECTRICAL DISCHARGE IN BUBBLED WATER FOR ENVIRONMENTAL APPLICATIONS	Oksana	Mozgina	Oksana Mozgina, Stevens Inst. of Technology;
2P69	CHARACTERIZATION OF ELECTRICAL DISCHARGES IN SALINE	Glen	Rothgery	Glen A Rothgery, Colorado State University; George J Collins, Colorado State University; Cameron A Moore, Colorado State University;
<b>2P70-79 Plasma, Ion and Electron Sources</b>				
2P70	DENSITY AND LIFETIME EVALUATION OF WEAKLY IONIZED PLASMA FOR LASER-TRIGGERED LIGHTNING BY MEANS OF LASER ABSORPTION	Michiteru	Yamaura	Michiteru Yamaura, Institute for laser technology;
2P71	INVESTIGATION OF PLASMA IRRADIATION SPECTRA AT THE DIAMOND LIKE CARBON FILMS DEPOSITION	Zhozef	Panosyan	Zhozef Panosyan, Head of laboratory; Fu-Jann Pern, PhD; Kenell Touryan, PhD; Arsen Darbasyan, Senior Researcher; Areg Meliksetyan, Researcher; Serzhik Voskanyan, Researcher; Vachagan Meliksetyan, Senior Researcher; Arman Voskanyan, Researcher; Yeremia Yengibaryan, Researcher;
2P72	DEVELOPMENT, FABRICATION AND TESTING OF A 15 CM DIAMETER HELICON SOURCE	Kristina	Lemmer	Kristina M Lemmer, University of Michigan Department of Aerospace Engineering;
2P73	A TG WAVE AS AN INSTABILITY SUPPRESSOR IN HELICON PLASMAS	Sun-Ho	Kim	Sun-Ho Kim, Department of Nuclear Engineering, Seoul National University; Y.S. Hwang, Department of Nuclear Engineering, Seoul National University;
2P74	CHARACTERIZATION OF AN INVERTED GEOMETRY HELICON PLASMA SOURCE	Benjamin	Masters	Benjamin C Masters, University of Illinois Urbana-Champaign; David N Ruzic, University of Illinois Urbana-Champaign;
2P75	SIDE EXTRACTION DUOPIGATRON-TYPE ION SOURCE FOR ION IMPLANTATION	Vasily	Gushenets	Vasily I Gushenets, High Current Electronics Institute;
2P76	ELECTROMAGNETIC SIMULATIONS OF PHOTOCATHODE SOURCES USING GREEN'S FUNCTION METHODS	Mark	Hess	Mark H Hess, Indiana University Cyclotron Facility;
2P77	HIGH EFFICIENCY FOR DIOXIN DEHALOGENAZATION USING AN ELECTRON SOURCE WITH A CARBON NANOTUBE	Michiteru	Yamaura	Michiteru Yamaura, Institute for laser technology;
2P78	CHARACTERIZATION OF MATERIAL PERFORMANCE OF CARBON-BASED FIELD EMITTERS	Ryan	Miller	Ryan Miller, University of Wisconsin; Vasilios Vlahos, University of Wisconsin;
2P79	SECONDARY ELECTRON EMISSION MEASUREMENTS FOR 3-20 $\mu$ M ALUMINUM FOILS USING A 70 KEV, DC ELECTRON BEAM	Mark	Kemp	Eric V. Steinfelds, University of Missouri-Columbia; Sudarshan K. Loyalka, University of Missouri-Columbia; Mark A. Kemp, University of Missouri-Columbia; Mark A. Prelas, University of Missouri-Columbia; Scott D. Kovaleski, University of Missouri-Columbia;
<b>3P Poster Session Wednesday 7 June, 2.00pm-4.00pm</b>				
<b>3P1-16 Space Plasmas</b>				
3P1	EXPERIMENTAL ANTENNA IMPEDANCE MEASUREMENTS IN A MAGNETIZED PLASMA	David	Blackwell	David D Blackwell, US Naval Research Laboratory;
3P2	EXPERIMENTAL OBSERVATIONS OF CYCLOTRON INSTABILITIES RELEVANT TO THE AURORAL KILOMETRIC RADIATION EMISSION PROCESS	Adrian	Cross	Irena Vorgul, School of Mathematics and Statistics, University of St Andrews; Adrian W Cross, Department of Physics, University of Strathclyde; Barry J Kellett, CCLRC, Rutherford Appleton Laboratory; R A Cairns, School of Mathematics and Statistics, University of St Andrews; Colin G Whyte, Department of Physics, University of Strathclyde; Craig W Robertson, Department of Physics, University of Strathclyde; Robert Bingham, CCLRC, Rutherford Appleton Laboratory; Alan DR Phelps, Department of Physics, University of Strathclyde; Kevin Ronald, Department of Physics, University of Strathclyde; Sandra L McConville, Department of Physics, University of Strathclyde; David C Speirs, Department of Physics, University of Strathclyde;
3P3	THE EVOLUTION OF THE SHEATH OF THE DENSE PLASMA FOCUS AS APPLIED TO INTENSE AURORAL OBSERVATIONS	Maria	Milanese	Maria M. Milanese, Instituto de Física Arroyo Seco-Univ. del Centro Bs. As.-CONICET; Roberto L. Moroso, Instituto de Física Arroyo Seco-Univ. del Centro Bs. As.-CONICET;
3P4	AN INTENSE Z-PINCH AURORA HORN MAPPED BY SURVEYS OF RECORDINGS FROM ANTIQUITY	Anthony	Peratt	Anthony L Peratt, Los Alamos National Laboratory; Mathias G Peratt, Raytheon Corporation, Space and Airborne Systems;

3P5	AN INTENSE AURORAL Z-PINCH RECORDED IN ANTIQUITY ON SOUTHWESTERN ARTIFACTS	Alfred	Qoyawayma	Anthony L Peratt, Los Alamos National Laboratory; Alfred H Qoyawayma, Qoyawayma Ceramics and Epigraphy;
3P6	INTENSE PREHISTORIC AURORAL Z-PINCH RECORDINGS: SURVEYS OF COLUMBIA RIVER GORGE AND SOUTH AUSTRALIAN PETROGLYPHS	Anthony	Peratt	Carol Pedersen, Oregon Branch, Columbia River Gorge Survey Project; John McGovern, Institute for Epigraphic and Aboriginal Recordings; Anthony L Peratt, Los Alamos National Laboratory;
3P7	INTENSE PREHISTORIC AURORAL Z-PINCH RECORDINGS: SURVEYS OF SOUTH KOREAN AND THAILAND PETROGLYPHS	Anthony	Peratt	Anthony L Peratt, Los Alamos National Laboratory; M. A Van der Sluijs, Mythopedia;
3P8	ANOMALIES IN SPACE WEATHER AS RELATED TO SEVERE PLASMA PHENOMENA	Zane	Dahlen	Zane Dahlen, Versamat Phoenix;
3P9	INTERACTION OF LIGHT BEAMS PROPAGATING IN 2S, 2P ATOMIC HYDROGEN; II GENERATION OF PERIODICITIES.	Jacques	Moret-Bailly	Jacques M Moret-Bailly, Université de Bourgogne, Dijon France.;
3P10	INTERACTION OF LIGHT BEAMS PROPAGATING IN 2S, 2P ATOMIC HYDROGEN; III APPLICATIONS IN ASTROPHYSICS	Jacques	Moret-Bailly	Jacques Moret-Bailly, Université de Bourgogne, Dijon France.;
3P11	ON DIAGNOSTICS OF SPACE PLASMA WITH TUBULAR DIPOLE ANTENNA	Arek	Kiraga	Arek Kiraga, Space Research Center;
3P12	UNFOLDING SPECTRAL PATTERNS INDUCED BY ARTIFICIAL WEAKLY RELATIVISTIC BEAM IN THE IONOSPHERE	Arek	Kiraga	Arek Kiraga, Space Research Center;
3P13	FROM MACROSCOPIC SIGNS OF NANODUST IN SPACE TO PROBABLE SIGNIFICANCE OF ELECTRODYNAMICS AT COSMOLOGICAL LENGTH SCALES	Alexander	Kukushkin	Alexander B. Kukushkin, RRC "Kurchatov Institute";
3P14	LARGE-SCALE SELF-SIMILAR SKELETAL STRUCTURES OF THE UNIVERSE	Valentin	Rantsev-Kartinov	Valentin A Rantsev-Kartinov, NFI RRC "Kurchatov Institute";
3P15	OBSERVATION OF THE SUN SELF-SIMILARITY SKELETAL STRUCTURES	Valentin	Rantsev-Kartinov	Valentin A Rantsev-Kartinov, NFI RRC "Kurchatov Institute";
3P16	STRUCTURES IN THE UNIVERSE AND ORIGIN OF GALAXIES	Valentin	Rantsev-Kartinov	Valentin A Rantsev-Kartinov, NFI RRC \;
	<b>3P17-33 Z-pinches and Radiation Sources</b>			
3P17	DYNAMICS AND RADIATION PERFORMANCE OF THE IMPLoding WIRE ARRAYS AT 1 MA ZEBRA GENERATOR	Andrey	Esaulov	Alla Safronova, University of Nevada, Reno; Victor Kantsyrev, University of Nevada, Reno; Andrey Esaulov, University of Nevada, Reno;
3P18	PLASMA DYNAMICS IN AN INVERSE WIRE-ARRAY Z-PINCH	Sergey	Lebedev	Sergey Lebedev, Imperial College London;
3P19	WIRE ARRAY Z-PINCH DYNAMICS WITH AXIAL MAGNETIC FIELDS	Simon	Bland	Simon N Bland, Imperial College London;
3P20	CONICAL WIRE ARRAY EXPERIMENTS ON THE ZEBRA GENERATOR	David	Ampleford	Jeremy P Chittenden, Imperial College, London; Christopher Deeney, Sandia National Laboratories; David J Ampleford, Sandia National Laboratories; Vladimir V Ivanov, University of Nevada, Reno; Victor L Kantsyrev, University of Nevada, Reno; P. David LePell, Ktech Corporation; Christopher A Jennings, Sandia National Laboratories; Alla S Safronova, University of Nevada, Reno; Brent Jones, Sandia National Laboratories; Ken Williamson, University of Nevada, Reno; Christine A Coverdale, Sandia National Laboratories; Glen Osborne, University of Nevada, Reno; Paul J Laca, University of Nevada, Reno; Dimitry Fedin, University of Nevada, Reno; Nicholas Ouart, University of Nevada, Reno; Vidir Nalajala, University of Nevada, Reno;
3P21	MEASUREMENT OF WIRE ARRAY Z-PINCH TEMPERATURE, DENSITY, AND PARTICLE TRANSPORT WITH SPECTROSCOPIC TRACERS*	Brent	Jones	Ishor Shrestha, University of Nevada, Reno; Christopher Deeney, Sandia National Laboratories; Brent M Jones, Sandia National Laboratories; Glenn Osborne, University of Nevada, Reno; Shivaji Pokala, University of Nevada, Reno; Vidya Nalajala, University of Nevada, Reno; Fatih Yilmaz, University of Nevada, Reno; Nicholas Ouart, University of Nevada, Reno; Dimitry Fedin, University of Nevada, Reno; Vladimir V Ivanov, University of Nevada, Reno; Vladimir I Sotnikov, University of Nevada, Reno; David J Ampleford, Sandia National Laboratories; Christine A Coverdale, Sandia National Laboratories; David E Bliss, Sandia National Laboratories; P. David LePell, Ktech Corporation; Alla S Safronova, University of Nevada, Reno; Victor L Kantsyrev, University of Nevada, Reno;

3P22	MODELING OF X-RAY SPECTRA FROM STAINLESS STEEL X-PINCHES AND WIRE ARRAYS PRODUCED ON THE 1 MA PULSED POWER GENERATOR AT UNR	Nicholas	Ouart	Christine Coverdale, Sandia National Laboratories; Matthew Gruner, Physics Department, University of Nevada; Dmitry Fedin, Physics Department, University of Nevada; Fatih Yilmaz, Physics Department, University of Nevada; Ishor Shrestha, Physics Department, University of Nevada; Glenn Osborne, Physics Department, University of Nevada; Kenneth Williamson, Physics Department, University of Nevada; Victor Kantsyrev, Physics Department, University of Nevada; Alla Safronova, Physics Department, University of Nevada; Christopher Deeney, Sandia National Laboratories; Thomas Cowan, Physics Department, University of Nevada; P. David LePell, KTech Corp.; Nicholas D Ouart, Physics Dept. University of Nevada, Reno;
3P23	ANALYSIS OF RECENT ALUMINUM WIRE ARRAY EXPERIMENTS ON Z WITH K-SHELL YIELDS OF ~350 KJ	John	Apruzese	John P Apruzese, Naval Research Laboratory;
3P24	A TIME-RESOLVED MEASUREMENT OF WIRE Z-PINCH K-SHELL DIAMETER	Philip	Coleman	Philip L Coleman, Alameda Applied Sciences Corp.;
3P25	POSITIVE POLARITY X-PINCH OPERATION	Isaac	Blesener	Peter Duselis, Cornell University; Sergey Pikuz, Cornell University; Marc Mitchell, Cornell University; Isaac Blesener, Cornell University; Bruce Kusse, Cornell University; Tania Shelkovenko, Cornell University;
3P26	AZIMUTHAL CLUMPING INSTABILITIES IN A Z-PINCH WIRE ARRAY	Yue Ying	Lau	Jacob Zier, University of Michigan; Matthew Gomez, University of Michigan; Christopher Garasi, Sandia National Laboratories; Edmund Yu, Sandia National Laboratories; M. Cuneo, Sandia National Laboratories; T. A. Mehlhorn, Sandia National Laboratories; Yue Ying Lau, University of Michigan; R. M. Gilgenbach, University of Michigan; Trevor Strickler, University of Michigan; Wilkin Tang, University of Michigan;
3P27	NONLINEAR DYNAMICS OF ELECTROMAGNETIC FLUTE MODE INSTABILITY IN Z-PINCH PLASMA	Vladimir	Sotnikov	Vladimir I Sotnikov, University of Nevada at Reno;
3P28	ANALYSIS OF EUV RADIATION FROM PLASMAS WITH LOW-Z ELEMENTS AND APPLICATION TO PULSED POWER EXPERIMENTS	Penka	Wilcox	Shivaji Pokala, UNR; Fatih Yilmaz, UNR; Kenneth Struve, Sandia National Laboratories, Albuquerque, NM 87185; John McGurn, Sandia National Laboratories, Albuquerque, NM 87185; Penka Wilcox, UNR; Kenneth Williamson, UNR; Victor Kantsyrev, UNR; Alla Safronova, UNR;
3P29	CHARACTERISTICS OF GAS JET Z-PINCH PLASMA LIGHT SOURCE FOR EXTREME ULTRAVIOLET LITHOGRAPHY	Masato	Watanabe	Eiki Hotta, Tokyo Institute of Technology; Inho Song, Tokyo Institute of Technology; Toshiro Sakamoto, Tokyo Institute of Technology; Yasunori Kobayashi, Tokyo Institute of Technology; Naoya Iizuka, Tokyo Institute of Technology; Nozomu Kishi, Tokyo Institute of Technology; Akitoshi Okino, Tokyo Institute of Technology; Smruti R. Mohanty, Tokyo Institute of Technology; Masato Watanabe, Tokyo Institute of Technology;
3P30	SOFT X-RAY RADIATION FROM NITROGEN FILLED Z-PINCH PLASMA PRODUCED BY CAPILLARY DISCHARGE	Yusuke	Sakai	Akitoshi Okino, Tokyo Institute of Technology; Masato Watanabe, Tokyo Institute of Technology; Yifan Xiao, Tokyo Institute of Technology; Yusuke Sakai, Tokyo Institute of Technology; Inho Song, Tokyo Institute of Technology; Takanori Komatsu, Tokyo Institute of Technology; Eiki Hotta, Tokyo Institute of Technology;
3P31	TWO-PULSE, THREE-BEAM HOLOGRAPHIC INTERFEROMETRY ON AN 8-CM DIAMETER, SHELL-ON-SHELL, NEON GAS-PUFF Z-PINCH	Robert	Commisso	Stephen J Stephanakis, Naval Research Laboratory; David Mosher, Naval Research Laboratory; David G Phipps, Naval Research Laboratory; David D Hinshelwood, Naval Research Laboratory; John J Moschella, HY-Tech Research, Inc.; Robert C Hazelton, HY-Tech Research, Inc.; Robert J Commisso, Naval Research Laboratory; Donald P Murphy, Naval Research Laboratory; Bruce V Weber, Naval Research Laboratory; Eric P Carlson, HY-Tech Research, Inc.;
3P32	DRIVE PARAMETER AS A DESIGN CONSIDERATION FOR MATHER AND FILIPPOV TYPES OF PLASMA FOCUS	Tao	Zhang	Tao Zhang, National Institute of Education;

3P33	HOLOGRAPHIC INTERFEROMETRY MEASUREMENTS ON A 12-CM DIAMETER DOUBLE-SHELL ARGON GAS-PUFF Z-PINCH	John	Moschella	Phillip L Coleman, Alameda Applied Sciences Corp.; Edward J Yadlowsky, HY-Tech Research Corp; Robert C Hazelton, HY-Tech Research Corp.; A Verma, Defense Threat Reduction Agency; John J Moschella, HY-Tech Research Corp.; Eric P Carlson, HY-Tech Research Corp; John R Thompson, Alameda Applied Sciences Corp.;
<b>3P34-37 CVD Diamond</b>				
3P34	SYNTHESIS OF ULTRACRYSTALLINE DIAMOND FILMS BY MICROWAVE PLASMA ASSISTED CHEMICAL VAPOR DEPOSITION SYSTEM	Dzung	Tran	Dzung T Tran, Prof. T.A. Grotjohn, Prof. J. Amussen;
3P35	DEPOSITION UNIFORMITY OF ULTRA NANO CRYSTALLINE DIAMOND ON 6	Ronny	Ziervogel	M.Kagan Yaran, Fraunhofer USA Center for Coatings and Laser Applications; Ronny Ziervogel, Fraunhofer USA Center for Coatings and Laser Applications; Richard Garard, Lambda Technologies Inc., Morrisville, NC 27560 USA; Jes Asmussen, Fraunhofer USA Center for Coatings and Laser Applications; Thomas Schuelke, Fraunhofer USA Center for Coatings and Laser Applications; Michael F Becker, Fraunhofer USA Center for Coatings and Laser Applications;
3P36	DEPOSITION AND POST-PROCESSING OF POLYCRYSTALLINE DIAMOND FOR FREESTANDING FILMS AND SUBSTRATES	Timothy	Grotjohn	Timothy Grotjohn, Michigan State University; Stanley Zuo, Michigan State University;
3P37	PHASE CONTROL OF N-TYPE NANOCRYSTALLINE DIAMOND FILMS DEPOSITED IN MICROWAVE PLASMAS FROM METHANE AND ACETYLENE	KUNGEN	TEII	KUNGEN TEII, KYUSHU UNIVERSITY;
<b>3P38-44 Intense Beam Microwave Generation</b>				
3P38	PROGRESS OF THE CESTA RKA EXPERIMENT	Jacques	GARDELLE	Jacques BARDY, CEA/CESTA; Jacques GARDELLE, CEA/CESTA; Patrick MODIN, CEA/CESTA; John T DONOHUE, CENBG;
3P39	EIGENMODES OF A CIRCULAR WAVEGUIDE WITH A DIELECTRIC ROD AND MAGNETIZED PLASMA AND PLASMA INFLUENCE ON CHERENKOV INTERACTION IN AN ANTENNA-AMPLIFIER	Anatoli	Shlapakovski	Anatoli S Shlapakovski, Nuclear Physics Institute;
3P40	STATUS OF THE DEVELOPMENT OF X-BAND ANTENNA-AMPLIFIER: DESIGN, SIMULATIONS, AND PROTOTYPE EXPERIMENTS	Anatoli	Shlapakovski	V. M. Matvienko, Nuclear Physics Institute; S. N. Artemenko, Nuclear Physics Institute; Edl Schamiloglu, University of New Mexico; Anatoli Shlapakovski, Nuclear Physics Institute; Weihua Jiang, Nagaoka University of Technology; I. I. Vintzenko, Nuclear Physics Institute;
3P41	EFFICIENCY ENHANCEMENT IN A6 MAGNETRON WITH TRANSPARENT CATHODE	Sarita	Prasad	Edl Schamiloglu, University of New Mexico; Sarita D Prasad, University of New Mexico;
3P42	MAGNETIC PRIMING EXPERIMENTS ON A LONG PULSE, RELATIVISTIC MAGNETRON	Brad	Hoff	Brad W Hoff, University of Michigan; Edward J Cruz, University of Michigan; T A Spencer, Air Force Research Laboratory; Ronald M Gilgenbach, University of Michigan; William M White, University of Michigan; Nicholas M Jordan, University of Michigan; Yue Y Lau, University of Michigan; Michael C Jones, University of Michigan; Vasile B Neculaes, University of Michigan; D Price, L-3 Communications-Titan Div.;
3P43	VIRCATOR: A REVERSE-MAGNETRON TYPE VARIATION OF VIRCATOR	Shen Shou	Chung	Shen Shou Max Chung, Department of Electronics Engineering, Southern Taiwan University of Technology, Tainan, Taiwan;
3P44	EFFICIENCY ENHANCEMENT IN A6 MAGNETRON WITH TRANSPARENT CATHODE	Sarita	Prasad	Sarita D Prasad, University of New Mexico;
<b>3P45-48 Fast-Wave Devices</b>				
3P45	STUDY OF GYROTRON BACKWARD-WAVE OSCILLATOR WITH EXTERNAL REFLECTIONS	S. H.	Chen	K. R. Chu, Department of Physics, National Tsing Hua University; Y. M. Tsai, Department of Physics, National Changhua University of Education; T. H. Chang, Department of Physics, National Tsing Hua University; C. C. Chiou, Department of Physics, National Tsing Hua University; K. F. Pao, National Center for Theoretical Sciences; S. H. Chen, Department of Physics, National Changhua University of Education;
3P46	CONSTRUCTION OF AN EXPERIMENTAL SECOND-HARMONIC CUSP GUN GYRO-TWT AMPLIFIER	Stephen	Harriet	David B McDermott, UC Davis; Neville C. Luhmann Jr., UC Davis; Stephen B Harriet, UC Davis / NSWC Crane;

3P47	UC DAVIS EXPERIMENTAL SECOND-HARMONIC CUSP GUN DRIVEN PENIOTRON	Lawrence	Dressman	Lawrence J Dressman, NSWC Crane/UC Davis; Neville C Luhmann, UC Davis;
3P48	DYNAMICAL BEHAVIORS OF INJECTION-LOCKED GYROTRON BACKWARD-WAVE OSCILLATORS	S. H.	Chen	S. H. Chen, Department of Physics, National Changhua University of Education; K. F. Pao, National Center for Theoretical Sciences; K. R. Chu, Department of Physics, National Tsing Hua University;
<b>3P49-52 Slow-Wave Devices</b>				
3P49	SIMULATION OF SMITH-PURCELL TERAHERTZ RADIATION: THE DARTMOUTH AND MIT EXPERIMENTS	Jacques	Gardelle	Jacques Gardelle, CEA/CESTA; John T Donohue, CENBG;
3P50	DESIGN OF A KA-BAND HELIX TRAVELING WAVE TUBES FOR LMDS	Young-Ho	Na	Young-Ho Na, Institute for Advanced Engineering; Jung Uk Shin, Institute for Advanced Engineering;
3P51	EFFECTS OF RANDOM GEOMETRIC PERTURBATIONS ON SLOW WAVE DEVICES	P	Pengvanich	R M Gilgenbach, University of Michigan, Ann Arbor, MI; J W Luginsland, NumerEx, Ithaca, NY; D Chernin, Science Applications International Corporation, McLean, VA; Y Y Lau, University of Michigan, Ann Arbor, MI; P Pengvanich, University of Michigan, Ann Arbor, MI;
3P52	MODELING OF MAGNETRON INJECTION LOCKING CHARACTERISTICS	P	Pengvanich	R M Gilgenbach, University of Michigan; V B Neculaes, University of Michigan; W M White, University of Michigan; R D Kowalczyk, University of Michigan; Y Y Lau, University of Michigan; M C Jones, University of Michigan; P Pengvanich, University of Michigan;
<b>3P53-57 Vacuum Microelectronics</b>				
3P53	MINIATURE W-BAND DIELECTRIC TRAVELING-WAVE TUBE DEVELOPMENT	Jose	Velazco	Jose E Velazco, Microwave Technologies Inc.;
3P54	DESIGN AND EXPERIMENT INPUT AND OUTPUT COUPLER FOR KA-BAND HELIX TW T	Junguk	Shin	Junguk Shin, no;
3P55	EXPERIMENTAL RESULTS OF A COMPACT COLD-CATHODE ELECTRON BUNCHER	Jose	Velazco	Jose E Velazco, Microwave Technologies Inc.;
3P56	EFFICIENT NANOTUBE-DRIVEN AMPLIFIER	Jose	Velazco	Jose E Velazco, Microwave Technologies Inc.;
3P57	HIGH CURRENT DENSITY ADVANCED COLD CATHODE FACILITY	Xin	He	Vasilios Valhos, UW, Madison; Nick Jordan, UM, Ann Arbor; Ron Gilgenbach, UM, Ann Arbor; John Scharer, UW, Madison; John Booske, UW, Madison; Xin He, UW, Madison;
<b>3P58-60 Codes and Modelling</b>				
3P58	THE FIELD MARSHAL ELECTROMAGNETIC SIMULATION ENVIRONMENT	Robert	Jackson	Robert H Jackson, Calabazas Creek Research, Inc.;
3P59	DEPENDENCE OF THE PEAK CURRENT ON THE HOLLOW CATHODE DIMENSIONS AND SECONDARY ELECTRON PRODUCTION IN A PSEUDOSPARK DISCHARGE	Selma	Cetiner	Peter Stoltz, Tech-X Corporation; Peter Messmer, Tech-X Corporation; Selma O Cetiner, Tech-X Corporation; Paul Schoessow, Tech-X Corporation;
3P60	EVOLUTION OF MODES IN MAGNETICALLY INSULATED CROSSED-FIELD DIODES	Keith	Cartwright	Keith L Cartwright, Air Force Research Laboratory;
<b>3P61-65 Microwave Systems</b>				
3P61	STUDY OF MULTIPACTOR IN X-BAND DIELECTRIC-LOADED ACCELERATING STRUCTURES	Steven	Gold	Allen K. Kinkead, LET Corp.; Wei Gai, Argonne National Laboratory; John G. Power, Argonne National Laboratory; Richard Konecny, Argonne National Laboratory; Chunguang Jing, Euclid Techlabs, LLC; Steven H Gold, Naval Research Laboratory;
3P62	AN ULTRA-WIDE BAND COAXIAL TO RECTANGULAR WAVEGUIDE CONVERTER FOR HIGH POWER MICROWAVE APPLICATION	Marie	MATHIAN	Marie MATHIAN, Laboratoire des Signaux et Systèmes, Departement de Recherche en Electromagnetisme, Supelec;
3P63	ELECTRON MULTIPACTOR DISCHARGE ON A DIELECTRIC IN A FINITE GEOMETRY	Nathaniel	Lockwood	Nathaniel P Lockwood, Air Force Research Laboratory;
3P64	DEMONSTRATION EXPERIMENTS FOR ACTIVE THERMAL IMAGING USING A MILLIMETER-WAVE SOURCE (ATIMS)	Melissa	Hornstein	Melissa K Hornstein, Naval Research Laboratory; Richard F Hubbard, Naval Research Laboratory; Tim D Andreadis, Naval Research Laboratory; David Lewis III, Naval Research Laboratory; Steven H Gold, Naval Research Laboratory; Geoffrey Smith, Naval Research Laboratory; Marcie Lombardi, Naval Research Laboratory; Arne W Fliflet, Naval Research Laboratory;

3P65	CHARACTERIZATION OF MATERIALS WITH LOW SECONDARY ELECTRON YIELD FOR USE IN HIGH-POWER MICROWAVE DEVICES	Prashanth	Kumar	Mark A Gilmore, University of New Mexico; Tengiz Svimonishvili, University of New Mexico; Lester Bowers, University of New Mexico; John A Gaudet, University of New Mexico; Edl Schamiloglu, University of New Mexico; Prashanth Kumar, University of New Mexico; Christopher A Watts, University of New Mexico;
<b>3P66-70 Microwave Plasma Interaction</b>				
3P66	NITROGEN DISSOCIATION DEGREE IN A HELICON PLASMA SOURCE INFERRED FROM MICROWAVE INTERFEROMETRY AND LANGMUIR PROBE CROSS MEASUREMENTS	Michael	Spencer	Michael J Spencer, West Virginia University, Physics Department;
3P67	HOW N2 FLOW RATE CHANGES ETCHING	SELCUK	HELHEL	SELCUK HELHEL, AKDENIZ UNIVERSITY;
3P68	PLASMA PARTICLE ROTATION BY MICROWAVE FIELDS	G. B. Kirby	Meacham	G. B. Kirby Meacham, Meacham Company;
3P69	POWER DEPOSITED ONTO A DIELECTRIC SURFACE BY MULTIPACTOR IN TWO REGIMES	Christopher	Fichtl	Nathan Lockwood, Air Force Research Laboratory; Keith Cartwright, Air Force Research Laboratory; Christopher Fichtl, Air Force Research Laboratory; Nick Vaccaro, Air Force Research Laboratory;
3P70	DISSIPATION OF MICROWAVES PROPAGATING THROUGH ATMOSPHERIC PRESSURE GLOW DISCHARGE PLASMA	ANAND	SRIVASTAVA	ANAND KUMAR SRIVASTAVA, INSTITUTE FOR PLASMA RESEARCH, INDIA; K. S. GANESH PRASAD, INSTITUTE FOR PLASMA RESEARCH, INDIA; P. K. ATREY, INSTITUTE FOR PLASMA RESEARCH, INDIA; VINAY KUMAR, INSTITUTE FOR PLASMA RESEARCH, INDIA;
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3P71	A COMPARISON BETWEEN THE DISCONTINUOUS GALERKIN METHOD AND THE HIGH RESOLUTION WAVE PROPAGATION METHOD FOR THE FULL TWO-FLUID PLASMA SYSTEM	Bhuvana	Srinivasan	Ammar Hakim, Aerospace & Energetics Research Program, University of Washington; Bhuvana Srinivasan, Aerospace & Energetics Research Program, University of Washington; John Loverich, Aerospace & Energetics Research Program, University of Washington; Uri Shumlak, Aerospace & Energetics Research Program, University of Washington;
3P72	3-DIMENSIONAL SIMULATIONS OF BREAKDOWN USING THE VORPAL SOFTWARE TOOL	David	Smithe	David N Smithe, Tech-X Corporation;
3P73	ENHANCEMENT OF HRP BINDING ON PLASMA-TREATED ULTRA-HIGH MOLECULAR WEIGHT POLYETHYLENE	Paul	Chu	Paul K Chu, City University of Hong Kong;
3P74	BIOACTIVITY AND CORROSION BEHAVIOR OF MAGNESIUM ALLOYS TREATED BY PLASMA ELECTROLYTIC OXIDATION	Paul	Chu	Liru Shen, Southwestern Institute of Physics; Fanya Jin, City University of Hong Kong; Xiangmei Liu, City University of Hong Kong; Guidong Xu, Southwestern Institute of Physics; Honghui Tong, Southwestern Institute of Physics; Paul K Chu, City University of Hong Kong;
3P75	A SELF-CONSISTENT COMPUTATIONAL MODEL FOR A THERMIONIC ENERGY CONVERTOR	John	Verboncoeur	John Verboncoeur, University of California-Berkeley; Austin Minnich, University of California-Berkeley;
3P76	OXIDANT EFFECTS ON THE PROMOTION OF NO REMOVAL BY NON-THERMAL PLASMA	LiMin	Dong	LiMin Dong, Harbin University of Science and Technology;
3P77	PARTICLE-IN-CELL PLASMA OSCILLATIONS WITH 4 TO 256 CELLS	Charles	Birdsall	Charles K Birdsall, EECS Dept., University of California, Berkeley; Jonathan Noland, NE Dept., University of California, Berkeley;
3P78	THREE DIMENSIONAL PIC SIMULATIONS OF THE TRANSPARENT AND EGGBEATER CATHODES IN THE MICHIGAN RELATIVISTIC	Peter	Mardahl	Lester Bowers, Air Force Research Laboratory; Peter Mardahl, Air Force Research Laboratory; Timothy Fleming, Air Force Research Laboratory; Edl Schamiloglu, University of New Mexico; Herman Bosman, University of New Mexico; Mikhail Fuks, University of New Mexico; Sarita Prasand, University of New Mexico;
<b>3P79-87 Dusty Plasmas</b>				
3P79	A HYBRID MODEL FOR COATING AND CHARGING OF SUBMICRON PARTICLES SUBMERGED IN A CH4-H2 PLASMA	Beniamino	Rovagnati	Giovanni Lapenta, Los Alamos National Lab; Beniamino Rovagnati, University of Illinois at Chicago; Farzad Mashayek, University of Illinois at Chicago;

<b>3P80</b>	BENCHMARKING THE DEMOCRITUS CODE	Christopher	Fichtl	Gian Luca Delzanno, T-15 Plasma Theory Group, LANL; Nimalan Arinaminpathy, OCIAM, Oxford, UK; Giovanni Lapenta, T-15 Plasma Theory Group, LANL; Christopher A Fichtl, T-15 Plasma Theory Group, LANL;
<b>3P81</b>	OSCILLATORY WAKE POTENTIAL DUE TO A MOVING TEST CHARGE IN MULTI-COMPONENT DUSTY PLASMA	Muhammad	Shafiq	Muhammad Shafiq, Alfvén Laboratory;
<b>3P82</b>	MOLECULAR DYNAMICS SIMULATIONS OF CRYSTALLIZATION PROCESSES IN COMPLEX PLASMAS	Boris	Klumov	Boris Klumov, Max-Planck-Institut für Extraterrestrische Physik ;
<b>3P83</b>	THE CHARGING OF DUST PARTICLES IN THE PRESENCE OF A MAGNETIC FIELD	Christopher	Fichtl	Giovanni Lapenta, T-15 Plasma Theory Group, LANL; Gian Luca Delzanno, T-15 Plasma Theory Group, LANL; Christopher Fichtl, T-15 Plasma Theory Group, LANL; Marlene Rosenberg, University of California, San Diego;
<b>3P84</b>	DEMOCRITUS: A SIMULATION TOOL FOR PLASMA-MATERIAL INTERACTION	Giovanni	Lapenta	Giovanni Lapenta, LANL;
<b>3P85</b>	EXPERIMENTAL STUDY OF DEBYE CLUSTERS USING BROWNIAN MOTION	Terry	Sheridan	Terry Sheridan, Ohio Northern University;
<b>3P86</b>	GENERATION OF X-RAY IMAGES USING A CNT-BASED CATHODE AS AN FIELD EMISSION ELECTRON SOURCE	H. Y.	Choi	H. S. Kim, Korea Electrotechnology Research Institute(KERI); J. U. Kim, Korea Electrotechnology Research Institute(KERI); H. Y. Choi, Korea Electrotechnology Research Institute(KERI); Y. H. Park, Korea Electrotechnology Research Institute(KERI); W. S. Chang, Korea Electrotechnology Research Institute(KERI);
<b>3P87</b>	MESOSCALE SIMULATION OF NANOPARTICLE COMBUSTION SYNTHESIS	Gianluca	Zuccaro	Giovanni Maizza, DISMIC, Politecnico di Torino, C.so Duca degli Abruzzi, 24 , 10129 Torino, Italy; Gianluca Zuccaro, Los Alamos National Laboratory; Giovanni Lapenta, Los Alamos National Laboratory;