

Technical Session	Technical Session Organizer
2.1 Intense Beam Microwave Generation	Craig Robertson (craig.robertson@strath.ac.uk)

Session MO 1.3: Intense Beam Microwave Generation I

Monday, May 22, 2017 from 10:00-11:45, Wildwood 12

Session Chair: Timothy P Fleming, Air Force Research Lab

10:00 MO 1.3-1 COMPUTER SIMULATIONS OF A MEGAWATT-CLASS S-BAND COAXIAL MAGNETRON

A. D. Andreev¹, C. Walker²

¹*Booz Allen Hamilton, Inc., Albuquerque, NM*

²*Communications & Power Industries, LLC, Beverly, MA*

10:15 MO 1.3-2 (invited) EXPERIMENTAL HOT TEST RESULTS FROM A COMPACT METAMATERIAL SLOW WAVE STRUCTURE

S. Prasad, S. Yurt, K. Shipman, D. Andreev, D. Reass, M. Fuks, E. Schamiloglu

Department of Electrical and Computer Engineering, University of New Mexico, Albuquerque, NM, United States

10:45 MO 1.3-3 AN EFFICIENT X-BAND CHERENKOV TYPE HIGH-POWER-MICROWAVE OSCILLATOR WITHOUT GUIDING MAGNETIC FIELD

L. Guo, T. Shu, Z. Li, J. Ju

College of Optoelectronic Science and Engineering, National University of Defence Technology, Changsha, China

11:00 MO 1.3-4 RECENT PROGRESS OF RADIAL-LINE RELATIVISTIC KLYSTRON

F. Dang, X. Zhang, J. Ju, H. Zhong, B. Bao

National University of Defense Technology, Changsha, Hunan, China

11:15 MO 1.3-5 OUTPUT POWER IMPROVEMENT IN RELATIVISTIC BACKWARD WAVE OSCILLATOR OPERATING UNDER LOW MAGNETIC FIELD

R. Chandra, V. Sharma, S. Kalyanasundaram, S. Singh, A. Roy, J. Mondal, S. Mitra, A. Patel, R. Agarwal, A. Sharma

Accelerator & Pulse Power Division, Bhabha Atomic Research Centre, Mumbai Maharashtra, India

11:30 MO 1.3-6 PULSE LENGTHENING OF AN S-BAND REPETITIVE LONG-PULSE RELATIVISTIC BACKWARD-WAVE OSCILLATOR (RBWO)

Z. Jin, J. Zhang, B. Qian, J. Yang, X. Ge

College of optoelectronics Science and Engineering,, National University of Defense Technology, Changsha, Hunan, China

Session WE 2.4: Intense Beam Microwave Generation II

Wednesday, May 24, 2017 from 16:00-18:00, Wildwood 13

Session Chair: John Jelonnek, Karlsruhe Institute of Technology, Germany

16:00 WE 2.4-1 RESEARCH AND DEVELOPMENT OF THE RECIRCULATING PLANAR CROSSED-FIELD AMPLIFIER

S. C. Exelby¹, G. B. Greening¹, N. M. Jordan¹, D. Simon¹, Y. Y. Lau¹, R. M. Gilgenbach¹, B. W. Hoff²

¹*Nuclear Engineering and Radiological Sciences, University of Michigan, Ann Arbor, MI, United States*

²*Directed Energy Directorate, Air Force Research Laboratory, Albuquerque, NM, United States*

16:15 WE 2.4-2 PLASMA-BASED PULSE SHORTENING IN THE RECIRCULATING PLANAR MAGNETRON

N. M. Jordan, G. B. Greening, S. C. Exelby, D. A. Packard, K. A. Schneider, Y. Y. Lau, R. M. Gilgenbach

Nuclear Engineering and Radiological Sciences, University of Michigan, Ann Arbor, MI, United States

16:30 WE 2.4-3 NOVEL RELATIVISTIC MAGNETRON WITH LENGTHY VIRTUAL CATHODE AND MAGNETIC MIRROR

E. Schamiloglu¹, M. Fuks¹, A. A. Koronovskii², S. A. Kurkin²

¹*Department of Electrical and Computer Engineering, University of New Mexico, Albuquerque, NM, United States*

²*Faculty of Nonlinear Processes, Saratov State University, Saratov, Russian Federation*

16:45 WE 2.4-4 DEVELOPMENT OF A PHASE-CONTROLLED MAGNETRON EXPERIMENT USING A MODULATED ELECTRON SOURCE

J. Browning¹, M. Pearlman¹, D. Plumlee¹, T. Akinwande², M. Worthington³, J. Cipolla³

¹*Electrical Engineering, Boise State University, BOISE, ID, USA*

²*Electrical Engineering, Massachusetts Institute of Technology, Cambridge, MA, USA*

³*L-3 EDD Communications, Williamsport, PA, USA*

17:00 WE 2.4-5 (invited) PROGRESS OF HIGH POWER MICROWAVE RESEARCHES AT THE NATIONAL UNIVERSITY OF DEFENSE TECHNOLOGY

J. Zhang, J. Ju, W. Zhang, X. Zhang, F. Dang, W. Li, D. Shi, H. Zhong

College of Optoelectronic Science and Engineering, National University of Defense Technology, Changsha, China

17:30 WE 2.4-6 (invited) MATERIAL SELECTION FOR THE PERIODIC ELEMENTS OF A METAMATERIAL-ENHANCED RESISTIVE WALL AMPLIFIER

T. Rowe, P. Forbes, J. H. Booske, N. Behdad

Electrical and Computer Engineering, University of Wisconsin-Madison, Madison, WI, United States