

## Session Program

18-22 Jun 2017



## 2017 IEEE Pulsed Power Conference

### ***Poster session I - High Power Microwaves, RF Sources and Antennas***

Hilton Brighton Metropole Hotel  
Kings Road Brighton BN1 2FU United Kingdom

# Monday 19 June

13:30

## Poster session I - High Power Microwaves, RF Sources and Antennas

Poster Session | Location: Hilton Brighton Metropole Hotel, Hall 4 / Cambridge

### High Power Soliton Generation Using Hybrid Nonlinear Transmission lines

**Speaker**

Dr Lauro Paulo Silva Neto

### Improved secondary windings for the Tesla transformer

**Speaker**

Prof. Ivor Smith

### Magnetic Coupling in Tesla transformers

**Speaker**

Prof. Ivor Smith

### High-Power RF Source for the Pulsed Fields Excitation in the Ground

**Speaker**

Yaroslav Tkach

### High-Current Test Stand for HPM Sources Testing Based on the Marx Generator

**Speaker**

Yaroslav Tkach

### Planar removable high voltage Vivaldi antenna

**Speaker**

Dr Jean-Christophe DIOT

### Experimental investigation of relativistic backward-wave oscillators operating in phase-induced regime

**Speaker**

Dr Vladislav Rostov

### Phase control in a klystron-like relativistic backward wave oscillator operating at low guiding magnetic field with 10 kW input signal

**Speaker**

Dr Renzhen Xiao

### An all circular waveguide four-way power combiner with ultra high power capacity and high combination efficiency

**Speaker**

Dr Renzhen Xiao

### DEVELOPMENT AND TEST OF A COMPACT PFN MARX FOR 100 PPS REPETITIVE OPERATION AT 400 kV - 85 ns - 5 ns RISE TIME ON A 100 Ohm LOAD

**Speaker**

Martial Toury

### EFFECTS OF PULSE SHAPES ON AXIAL VIRTUAL CATHODE OSCILLATOR

**Speaker**

Mr Se-Hoon Kim

**Analysis on Design Parameters of Plasma Limiter for Protecting against High Power Electromagnetic Pulse****Speaker**

Young-Maan Cho

**Results of an S-band Sheet Beam Klystron Development Effort****Speaker**

Michael Perkins

**A Test Stand used to Evaluate a Prototype S-band Sheet Beam Klystron****Speaker**

Michael Perkins

**Multi-point Ignition Process in Methane-air Mixtures by Pulsed Microwave Power****Speaker**

Mr Cheng Liu

**PARTICLE-IN-CELL CODE INVESTIGATION OF MAGNETIC FIELD EFFECT ON AXIAL VIRCATOR****Speaker**

Dr Shen Shou Max Chung

**The Design Energy Saving Device for RF System at Taiwan Photon Source.****Speaker**

Fu-Tsai Chung

**Emitter Residual Gas Effects in a High Power Microwave System****Speaker**

Denny Åberg

**Experimental Studies on Cathode Material Dependence of Microwave Power in Axially-Extracted Vircator with Resonance Cavity****Speaker**

Mr Motohiro Teramae

**Modification of Townsend Breakdown Theory for investigating the High-Power Microwave Propagation in the Atmosphere****Speaker**

Bao-Liang Qian

**Compact Marx Generator and High Power Microwave System****Speaker**

David Barnett

**35 kV Inductive Adder for Driving 50  $\Omega$  with Fast Rise Time****Speaker**

Mr John Carscadden

**Laser induced plasma for HPM Compressor Switching**

**Speaker**  
Dr Jacob Cohen

**Periodic Structures Manufactured by 3D Printing for Electron Beam Excitation of High Power Microwave Sources**

**Speaker**  
Adrian Cross

**4616V4 Tetrode and Klystron RF Resources for CSNS LINAC**

**Speaker**  
Wenzhong Zhou

15:00