### **Session Program**

5-9 Jul 2016



# 2016 IEEE Power Modulator and High Voltage Conference

### Poster 1-A

<a href=http://www.sfpalace.com/>Palace Hotel San Francisco</a> 2 New Montgomery St. San Francisco, CA 94105United States

### Wednesday 6 July

### 13:30

### Poster 1-A

Poster Session | Location: Palace Hotel San Francisco, Twin Peaks

### HIGH-FIELD EXCITED FLASHOVER ACROSS SOLID DIELECTRICS IN VACUUM: MECHANISM AND SUPPRESSION

### Speaker

Guan-Jun Zhang

### Investigation Dielectric Materials at Different Frequency Ranges

Speaker

Dr Emel Onal

### **Development of Variable Charging System for Voltage Adjustment**

**Speaker** Ryoma Ogata

### sub-microsecond Pulse Generators Based on Magnetic Pulse Compression System

Speaker Mr Dongdong Zhang

### Influence of Metallic Particle on Flashover Characteristics of Post Insulator in SF6 Under Negative DC Voltage

**Speaker** Can Guo

# Permittivity and Permeability in Double Positive Metamaterials Fabricated with Barium Titanate

**Speaker** Kelli Noel

## Numerical analysis on the output characteristics of a linear switch array pulse modulator

Speaker Mr Tonglei Wang

# Performance improvement of a compact pulsed neutron generator with a vacuum arc ion source

**Speaker** zhen yang

# Dielectric properties and surface flashover characteristics of Al2O3-filled epoxy resin in subatmospheric pressure under 20-200 kHz applied pulsed fields

**Speaker** Hulya Kirkici

Characterization and Fabrication of Carbon Nanotubes Grown on Ceramic Substrates for High Temperature RFID Applications **Speaker** Baha Yakupoglu

### A High Repetition-rate Bipolar Nanosecond Pulse Generator Based on Magnetic Pulse Compression System

Speaker

Mr Yan Mi

# DESIGN AND PERFORMANCE OF AN 8 LINE GYROMAGNETIC NONLINEAR TRANSMISSION ARRAY

Speaker

Mr Hunter Cravey

### GYROMAGNETIC NONLINEAR TRANSMISSION LINE WITH SEALED SPARK GAP

Speaker

Robert Ryan

# Flashover characteristics of metal particle contaminated GIS insulator under DC voltage

### SURFACE FLASHOVER CHARACTERISTICS OF GROOVED NANODIELECTRICS UNDER PULSED VOLTAGE IN PARTIAL VACUUM

Speaker

Mr Yuxuan Chen

### A 400A programmable linear current pulse generator

Speaker Tony Fowler

### Effects of mechanical pre-stress on the dielectric strength of alumina Al2O3

**Speaker** Ms Zenjebil Jouini

### **Dielectric Strength Testing of 3D Printed Polymeric Materials**

Speaker

Dr Brad Hoff

# Partial discharge measurements and IEC standards: Justification of the use for their inclusion in afterlaying test for extruded cable systems

**Speakers** Dejan Bešlija, Mirza Batalović

### Electro-Convection in Liquids in Absence of Ionization

Speaker

Alexander Pokryvailo

### Analysis of Insulation Failure of Polymer Composite Blocks Using High Frequency Wave Shapes

Speakers

Prof. Elanseralathan Kasinathan, Mr Logesh Guber, Makendran Gunasekaran, Mr Malaiyappasamy Sivashanmugam

# Insulation deterioration of twisted pairs due to high frequency switching of power Electronic Converters (PECs)

### Screamer: An Optimized Pulsed-Power Circuit Analysis Tool

### Towards sub-ppm Shot-to-shot Amplitude Stability of SwissFEL Resonant Kicker

Speaker

Martin Paraliev

### Effects of Thyratron Aging on Klystron RF Pulse Stability

Speaker

Paolo Delgiusto

### Construction and commissioning Xbox3: a very high capacity X-band test stand

Speaker

Gerard Mcmonagle

### GW-class relativistic backward-wave oscillator with pulse duration above 200 ns

Speaker

Dr Xingjun Ge

### High Power Microwave Production with a Nanosecond Pulser and Nonlinear Transmission Line

Speaker James Prager

### A two dimensional circuit model of induction cavity

Speaker

Mr Guo Fan

### A 100kV Nanosecond Pulse Generator Based on Magnetic Pulse Compressor

Speaker dong zhang

### Stability of thyratron switching in LCLS linac modulators

Speaker Dr Andrew Benwell

## The reseaches on compact repetitive pulsed power system based on Marx generator

**Speaker** Prof. shirong hao

### Pressure rise calculation due to an internal arc fault in HV metal-enclosed SF6 GIS

### Analysis of Peak Output Voltage and Droop from a Nonuniform Transmission Line

Speaker Chongyang Mao

High Power Microwave Pulse Compressors With a Variable Geometry of Accumulative Resonant Cavity

simulation and design of the multi-channel isolated charging for solid-state MARX generators

Chopper-Marx Circuit for Application to ILC: 1. Switching and Voltage Adding

**Speaker** Mr Ryutaro Suzuki

### Chopper-Marx Circuit for Application to ILC: 2. Charging and System Control

Speaker

Mr Takumi Hayashi

### **Modular Marx Generator**

**Speaker** Kirk Rainwater

# A Marx-Based Power Converter topology as a Current Source for Pulsed Magnets in Particles Accelerators

**Speaker** Dr Davide Aguglia

### A Compact High Voltage Pulse Generator for Three Plasma Synthetic Jet Actuators Synchronous Discharge

**Speaker** Mrs Chengyan Ren

### **Thyratron Stability Improvements of SNS Extraction Kicker System**

### **MULTICHANNEL SIGNAL SYNTHESIS IN FREE SPACE**

**Speaker** Zachary Shaw

# Influence of Test Conditions on the Thermally Stimulated Current Characteristics of Silicone Rubber Used for Composite Insulators

**Speaker** Ms Lijuan Gao

### A Repetitive Rate Pulse System Used in Lifetime Evaluation of High Voltage Ceramic Capacitors

Speaker

Mr Jiaqi Yan

### Custom designed Dummy Loads for HV Pulsed Power Modulator Testing

#### Speaker

Michael Osemann

15:00