### **Session Program**

3-7 Jun 2018



### 2018 IEEE International Power Modulator and High Voltage Conference

### Poster 2 - High Voltage Design and Power Modulator Components

Jackson Lake Lodge, Jackson Lake Lodge 101 Jackson Lake Lodge Road, Jackson Lake Lodge, Moran, WY 83013 Phone: (307) 543-3100

### Tuesday 5 June

3:30	Poster 2 - High Voltage Design and Power Modulator Components
	Poster Session   Location: Buffalo/Moose
	Injection kicker for HESR using semiconductor switches.
	Dynamic Impedance Load for Over-current Testing of Semiconductor-based Marx Generators
	Solid State Power Emulator Improvements for Power Device Evaluation Speaker Mr Richard Thomas
	Active gate control for multiple series connected SiC MOSFETs
	Experimental Results of an Isolated Resonant DC-DC Converter for High Voltage Application
	A fast 5kV 5kA power supply for Active Electrodes of Fusion Generator C2-W (Norman).
	Measured data and model for erosion of a spark gap at continuous 800 Hz, 10 J pulsed operation
	Research of a New DC Breaker Based on the Elec-tromagnetic Forming Technology Speakers tonghai ding, Dr Yun Xu, Hongfa Ding
	Ribbon Cables as Stripline Components
	Comparative Study of Pulse Trigger Circuit and DC Trigger Circuit for Xenon Flash Lamp Driver
	Speaker Prof. Hong-Je Ryoo
	An 8kV Series-Connected MOSFETs Module That Requires One Single Gate Driver Speaker Mr Tianjun Long
	HIGH CURRENT SENSING THROUGH FARADAY ROTATION OF POLARIZED LIGHT OF VARYING WAVELENGTHS IN FIBERS II
	<b>Speakers</b> Mr Sean Coffey, Dr T. Chris Grabowski
	Automated GTO Measurement, Validation and Stack Selection System for the LHC Beam Dumping System
	Klystron Modulators for the FAIR pLINAC

# A Review of Voltage Sharing Control Methods for Applications of Series-Connected IGBTs in Pulsed Power Generation

#### Surge Current Analysis of COTS 1200V Silicon Carbide JBS Diodes

Speaker

Dr Stephen Bayne

#### A Transformer Vibration Signal Separation Method Based on BP Neural Network

**Speaker** Chunhui Gu

#### Phase I Summary: Neutral Beam Injector Grid Power System

Partial discharge characterization in soft dielectrics using thin film PVDF sensors to detect ultrasonic waves

#### Analysis of Commercial GaN HEMT in Overcurrent Operations under Higher Ambient Temperature

Speaker Mr Matthew Kim

Transient Voltage Distribution Characteristics of Ultrahigh-Voltage Transformer Windings under Impulses with Different Front Time

"Large" HV Structures: Transient Analysis of Voltage Distribution from First Principles

#### SOLID STATE LASER TRIGGERING SYSTEM FOR THE HERMES-III ACCELERATOR

**Speaker** Chris Grabowski

#### **Optimized High Voltage Analog Switch IC using Low Breakdown SOI technology**

A pulsed current supply based on solid-state Marx generators in parallel

### Study on Electrically Excited Winding Vibration Frequency Response Under Various Clamping Pressures

**Speaker** Mr Cao Zhan

#### Study on the Influence of Temperature on Transformer Core Vibration

#### **Development of High Voltage Multilevel Step-wave Voltage Source**

**Speaker** Mr Tianjun Long

#### Saturation behavior of nano-crystalline pulse compression cores

Speaker

Claus Strowitzki

A High Voltage, Solid-State Switch for Magnetron Driving

#### Development of a Discharge Circuit for High Voltage DC Power Supplies

An Analysis of Strike and Restrike Characteristics of the Exploding Film Phenomenon Under Different Temperature and Pressure Conditions

## DESIGN AND CONSTRUCTION OF HIGH VOLTAGE MODULATORS TO PRODUCE RECTANGULAR PULSES

**Speaker** Antoine SILVESTRE de FERRON

#### **High Density Capacitors for Pulsed Power Applications**

Speaker

Kenneth Struve

# POWER MOSFET AND TANTALUM CAPACITOR PERFORMANCE IN LOW DUTY FACTOR HV CONVERTER DESIGNS

**Speaker** Mr Joshua Gilbrech

# A SERIES INJECTION RESET CIRCUIT FOR HIGH VOLTAGE MAGNETIC SWITCH APPLICATIONS

Speaker

Mr Joshua Gilbrech

Analysis and design of a passive protection system for the High Voltage RadioFrequency Test Facility circuit components

15:00