

## **Session Program**

**3-7 Jun 2018**



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

## ***Poster 3 - Power Modulator Systems and Applications***

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

## Wednesday 6 June

13:30

### Poster 3 - Power Modulator Systems and Applications

Poster Session | Location: Buffalo/Moose

#### High Burst Rate Charging System for the Lithium Lens Power Supply

**Speaker**

Daniil Frolov

#### Characteristic Evaluation of Virtual Cathode Oscillator with High Transmittance Anode

#### High Power Microwaves facilities and generators of CEA/GRAMAT

#### RF measurements to determine tranverse impedance of a linear accelerator cell

#### A FEM-based simulation of electromagnetic forces on transformer windings under short-circuit

**Speaker**

Mr Yi Zhao

#### An Innovative Method for generating High-Stability Flat-Top Pulsed Magnetic Field

#### Nanosecond Electric Pulses for Anti-Cancer Treatment

#### Improving the voltage modulation depth and RF power generated on Nonlinear Transmission lines

**Speaker**

Dr Lauro Paulo Silva Neto

#### Pulsed Electric Field Processing of Fruits and Vegetables

#### Characterisation of a DBD plasma in dependence of its supply parameters for surface modification

#### Experimental Demonstration of a Representative Rotary Motor and Linear Actuator Using Controlled Turn-less Structures Arrays Motors (CTM)

#### GAS TEMPERATURE DEPENDENCE ON PULSE FREQUENCY IN NANOSECOND-PULSE HIGH-FREQUENCY DISCHARGES

#### Simulation study of switching over-voltage of UHVDC transmission system under hierarchical connection mode caused by typical faults

#### Activation of Endoplasmic Reticulum Stress Response by Applying of Nanosecond Pulsed Electric Fields for Medical Application

#### Development of a compact, 240-kV, 10-J impulse generator for mobile platforms

## **Development of High Power Burst Pulse Generator for Cancer Treatment and Investigation of Superiority of High Power Burst Pulse as against Single Pulse**

### **Speaker**

Hiromi Sato

## **Design and characterization of a benchtop electron beam system for validation of gas transport**

## **Consolidation of the 400kA magnetic horn power supply for AD antiproton production**

## **Study of the electrostatic precipitator efficiency according to particle size and HV supply**

## **Electric Pulse Modification of Cancer Cell Population Dynamics**

## **Optimisation of the FRANZ chopper system**

### **Speaker**

Christopher Wagner

## **Spatially Dispersive Nonlinear Transmission Line Experimental Performance Analysis and COMSOL Simulation Development**

## **RF Generation at 200 MHz Using a SiC Schottky Diode Lumped NLTL\***

### **Speakers**

Dr Jose Rossi, Lauro Paulo Silva Neto

## **Measurement and analysis of luminescence signal and emission spectrum in vacuum surface flashover for polymeric materials**

## **Development, Implementation and Final Performance of the new PS Booster Distributor Generators (PFN, 6.3kV/1kA) with Fast Protection System**

## **PROTOTYPE INDUCTIVE ADDER FOR THE PROTON SYNCROTRON AT CERN**

### **Speaker**

David Woog

## **Developing a benchmark example of magnetically insulated transmission line current loss**

### **Speaker**

Andrew Fierro

## **Simultaneous Switching of Multiple GaN Transistors in a High-Speed Switch**

### **Speaker**

Daniil Frolov

## **A Multiple Material Velocimetry Based Current Loss Detector for Pulsed Power Systems**

## **Design and First Tests of a Cathode Ion Detector at Z (CIDZ) to Measure Positive Ion Current at the Convolute on the Z Machine**

## **Electrical Characteristics of Low Voltage Compact Virtual Cathode Oscillator**

**Nonlinear Transmission Line for RF Plasma Heating****Interaction of water with Barium Titanate thin films and nanoparticles: Oxygen-deficient defects and hydrogen decorated surfaces****Speaker**

Renee Van Ginhoven

**Synergistic enhancement of antibiotic susceptibility of bacteria using nanosecond electric pulses****A multi-waveform pulsed current generator for slow kicker magnets****Discussion of Discharge Distribution in Reactor and Design of Reactor for Dense Ozone Production Using Nanosecond Pulsed Power****Speaker**

Mr Yuki Utsumi

**HIGH-SPEED IMAGING OF EXPLODING DETONATORS****Speaker**

Mr Henry Gaus

**Life Review and Development of Thyatron in Linac Coherent Light Source****Speaker**

Dr Xupeng Chen

**Pulse power system for formation and acceleration of field-reversed configurations in C2-W.****Impedance Information from Different Electrode-pairs under four electrodes-Refelecting the irreversible electroporation outcome****Speaker**

Yajun Zhao

**Treatment of Anionic Surfactant Solution Using Nanosecond Pulsed Power Discharges****Analysis of Pulsed RF Signals Radiated from a Capacitive NLTL\*****Speaker**

Dr Jose Rossi

15:00