

Session Program

22-28 Jun 2019



PPPS 2019

Poster - Charged Particle Beams and Accelerators and High Energy Density Plasmas and Applications

DoubleTree at the Entrance to Universal Orlando
5780 Major Blvd. Orlando, Florida, 32819, USA

Thursday 27 June

16:00

Poster - Charged Particle Beams and Accelerators and High Energy Density Plasmas and Applications

Poster Session | **Location:** Universal Center | **Convener:** Dr Alexander Velikovich

4P21 - Propagation of an intense relativistic electron beam through plasma.

Speaker

claude fourment

4P35 - Development of an electron-beam pumped, argon fluoride laser for inertial confinement fusion*

Speaker

Matthew Myers

4P50 - Optimizing Micropinches Produced by Hybrid X-pinches for High Time Resolution X-ray Spectroscopy

Speaker

Ahmed Elshafiey

4P52 - Experimental measurement of thermal and electrical conductivities in warm dense state generated by pulsed-power discharge for efficient energy conversion of fast ignition

Speaker

Shingo Kusano

4P33 - Development of high-voltage power supply system for upgrading ECH system of the KSTAR

Speaker

Dr Sunggug Kim

4P30 - Improvement of Heaven-I high power excimer laser facility for ICF study

Speaker

Zhixing Gao

4P61 - Magnetic Field Diffusion into Al-6061 Rod under Megaampere Current Drive

Speaker

Seth Kreher

4P55 - SIMULATIONS OF NOZZLE GAS FLOW AND GAS-PUFF Z-PINCH IMPLOSIONS WITH MAGNETIC FIELDS IN THE WEIZMANN Z-PINCH*

Speaker

Varun Tangri

4P57 - ABLATION BEHAVIORS AND IMPLOSION DYNAMICS OF PRECONDITIONED TWO-WIRE Z-PINCH

Speaker

Mr Yihan Lu

4P39 - The Design, Properties, Operation and Modeling of the STPX Plasma Device

Speaker
R. Williams

4P49 - Target machining using datum point tooling for Precision High Energy-Density Liner Implosion Experiment (PHELIX) magnetic implosion system

Speaker
Franklin Fierro

4P69 - Characterization of Neutron Production in Deuterium Z-pinch Experiments at Current of 3 MA

Speaker
Jakub Cikhardt

4P68 - Faraday-Rotation fiber-based gauge for current measurement in pulse-power systems

Speaker
Dr Kobi Cohen

4P44 - Analysis for the Generation of Extreme Ultraviolet (EUV)/Soft X-Ray Radiations based on Short Pulse Electron Beams

Speaker
Varun .

4P67 - Extending Experimental and Diagnostics Capabilities on the 1-MA, 100-ns MAIZE Pulsed Power Facility

Speaker
Akash Shah

4P66 - Initial Conditions & Plasma Evolution in the Hawk Dense Plasma Focus

Speaker
Joseph Engelbrecht

4P65 - X-ray Spectroscopy and Total Yield Measurements on a Microsecond X-Pinch

Speaker
G.S. Jaar

4P63 - Measurements of the Magnetic Rayleigh Taylor Instability in Centimeter-Scale Magnetized Plasma Bubbles*

Speaker
R. H. Dwyer

4P62 - Electrostatic gyrokinetic simulations of sheared Z-pinch

Speaker
Dr Vasily Geyko

4P60 - Millimeter-wave Radiometry and Coherent Thomson Scattering for Studies of Power Balance in COBRA*

Speakers
Thomas Schmidt, Dr M. Gilmore

4P58 - Understanding electrothermal instability growth by comparing z-pinchs with engineered defects to 3D-MHD simulations

<p>Speaker Dr Thomas Awe</p>
<p>4P51 - Diagnostics to study electrothermal instabilities on MYKONOS</p> <p>Speaker M. Gilmore</p>
<p>4P41 - Overview of the C-2W Formation Section Pulsed Power</p> <p>Speaker Mr Ian Allfrey</p>
<p>4P40 - Elements of Three Dimensional Modeling of a Pulsed Fission Fusion Hybrid Z-Pinch Target for Advanced Propulsion</p> <p>Speaker Dr Jason Cassibry</p>
<p>4P32 - Parametric Study of a Cylindrical Inertial Electrostatic Confinement Fusion Device and its Application</p> <p>Speaker Smruti Ranjan Mohanty</p>
<p>4P56 - Study on Fault Conditions of a Single Stage of Fast Linear Transformer Drivers</p> <p>Speaker Mr Zhenyu Wei</p>
<p>4P45 - Combustion of electrical underwater exploded aluminum wire</p> <p>Speaker Dr Sergey Efimov</p>
<p>4P31 - Auto-collimation and monitoring of KrF laser beam in the E-beam pumped high power excimer laser facility</p> <p>Speaker Mrs Jing Li</p>
<p>4P46 - Fine Liquid-Metal Load for Repeatable Applications of Pulsed-power Discharge</p> <p>Speaker Toru Sasaki</p>
<p>4P18 - DETERMINATION OF THE PARTICLES INVOLVED IN ANODE INITIATED VACUUM BREAKDOWN USING A 1-MV, 50-NANOSECOND PULSE GENERATOR*</p> <p>Speaker Dr Raymond Allen</p>
<p>4P17 - Electron Beam Studies and X-ray Spectroscopy of Dense Plasma Focus Experiments</p> <p>Speaker Emil Petkov</p>
<p>4P13 - CNT Field Emission Cathodes Evaluated for a Portable X-Ray Generator for Root Imaging</p> <p>Speaker Mr Enbo Yang</p>

4P12 - Radio Frequency Plasma Generation without 50 Ohm Matching**Speaker**

Tim Ziemba

4P11 - Properties of the energy-controlled atmospheric pressure plasma driven by multi-step external ballast capacitors**Speaker**

Dr Chang-Seung Ha

4P06 - Plasma source with multi-aperture extraction system for generating a ribbon electron beam**Speaker**

Dr Denis Zolotukhin

4P10 - Statistical Quantization and Optimization of Cold Atmospheric Pressure Plasma Source for Destroying Bacteria and Biofilms through Design of Experiments Method**Speaker**

Adam Croteau

4P09 - Experimental Investigation of Pseudospark Discharge Based Plasma Cathode Electron Source for the Generation and Propagation of High Density and Energetic Electron Beams**Speaker**

Varun .

4P08 - Studies on power transfer efficiency in the drivers of the SPIDER inductively coupled RF ion source**Speaker**

Palak Jain

4P07 - Monte-Carlo modelling of parallel electron transport in the Proto-MPEX linear plasma device**Speaker**

Dr Juan Caneses

4P05 - Features of the millisecond arc discharge generating emission plasma in the forevacuum plasma-cathode source of large-radius electron beam**Speaker**

Dr Andrey Kazakov

4P02 - Particle-in-cell modeling of the Saturn accelerator vacuum section**Speaker**

Ben Ulmen

4P01 - Validation of a configurable ion source for testing spaceflight-based thermal plasma measurement instruments**Speaker**

Ms Ellen Robertson

4P24 - SATURN ACCELERATOR BREMS DIODE SINGLE CATHODE CURRENT SCALING**Speaker**

Mr Nathan Joseph

4P19 - Effects of the electron beam parameters on hydrodynamic response of aluminum: measurements and simulations.**Speaker**

Dr Jacques Gardelle

4P22 - Comparisons of a Quantum Photoemission Model with Three-step Model and Fowler-Dubridge Model**Speaker**

Yang Zhou

4P20 - PROPAGATION OF ELECTRON BEAMS IN GAS CELLS**Speaker**

Dr Bruno Cassany

4P59 - Investigating the Electrothermal Instability in Pulsed Power Solid Liner Implosions Using Extended Magnetohydrodynamics**Speakers**

Robert Masti, Dr Bhuvana Srinivasan

4P64 - Zeeman Spectroscopy Studies in Ar Gas Puff Z-Pinches on 1-MA COBRA***Speaker**

Dr Niansheng Qi

4P38 - Hybrid fluid/kinetic modeling of dense plasma focus devices using USim and VSim**Speaker**

Christine Roark

4P27 - EMPIRE simulation of the RKA diode into the gas cell**Speaker**

Brandon Medina

4P29 - PIC simulation of ion beam expansion in a drift cone configuration for RFEA measurements.**Speaker**

Yao Du

4P75 - Laser-driven acceleration of titanium ions from ultrathin targets and the calibration of the ion beam diagnostic**Speaker**

Joseph Strehlow

4P76 - Topanga: A Modern Code for E3 EMP Simulations**Speaker**

Bruce Cohen

4P77 - Simplified Radiation Model for Atmospheric Plasmas**Speakers**

Michael Mallon, Marina Kühn-Kauffeldt

4P78 - Generation and propagation of nitrogen laser pulses of long (< 3 μ s) duration in air

17:30

Speaker

Mladen M. Kekez

4P53 - 2D Simulations of the ns-Laser Shock Peening

Speaker

Mr Vasily Pozdnyakov