

**Opportunities in Frontier Plasma Science
List of Awards**

PI Name	Institution	City, State	Proposal Title
Bruggeman, Peter	Regents of the University of Minnesota	Minneapolis, MN	Electric field measurements to investigate sheath formation in nanosecond pulsed discharge
Burton, Justin	Emory University	Atlanta, GA	Dynamical Inference and 3D Imaging of Magnetized Dusty Plasmas
Campanell, Michael	Lawrence Livermore National Laboratory	Livermore, CA	Experimental Demonstration of Inverse Plasma-Surface Interaction Regimes
Carreon Garciduenas, Maria	South Dakota School of Mines & Technology	Rapid City, SD	Understanding the cold plasma synthesis of ammonia with model metal catalysts through plasma diagnostics
Casey, Tiernan	Sandia National Laboratories - California	Livermore, CA	Analysis of H ion plasma chemical kinetics models using global sensitivity analysis
Dobrynin, Danil	Drexel University	Philadelphia, PA	Measurements of OH radical concentrations in uniform and non-uniform nanosecond-pulsed atmospheric air dielectric barrier discharge plasma
Dorfman, Seth	Space Science Institute	Boulder, CO	Strong Turbulent Alfvén Wave Interactions in a Laboratory Plasma
Eckart, Megan	Lawrence Livermore National Laboratory	Livermore, CA	Laboratory astrophysics via high-resolution x-ray spectroscopy at the Madison Symmetric Torus
Fox, William	Princeton Plasma Physics Laboratory	Princeton, NJ	Exploring the frontiers of fast magnetic reconnection and explosive plasma phenomena using the DIII-D facility
Fridman, Alexander	Drexel University	Philadelphia, PA	Theory and modeling of nanocrystalline-amorphous transition in liquids
Fu, Xiangrong	NEW MEXICO CONSORTIUM	Los Alamos, NM	Nonlinear Interactions of Alfvén Waves in Multi-ion Plasmas
Gerakis, Alexandros	Texas A&M Engineering Experiment Station	College Station, TX	Development of theory and experimental operational framework for Coherent Thomson Scattering

Go, David	University of Notre Dame du Lac	Notre Dame, IN	Electric Field Measurements at the Surface of a Piezoelectric Transformer for Plasma Jet Formation using the Plasma Research Facility at Sandia National Laboratory
Koepke, Mark	West Virginia University Research Corporation	Morgantown, WV	Decomposing turbulence: Modal vs. nonmodal approaches
Koepke, Mark	West Virginia University Research Corporation	Morgantown, WV	Electromagnetic IEDDI (Inhomogeneous-Energy-Density-Driven Instability) in LAPD
Koepke, Mark	West Virginia University Research Corporation	Morgantown, WV	Nonlinear processes during toroidal alfvén mode-mode interaction
Kuranz, Carolyn	Regents of the University of Michigan	Ann Arbor, MI	Solar system storms in the lab: creating a scaled interplanetary coronal mass ejection
Langendorf, Samuel	Los Alamos National Laboratory	Los Alamos, NM	LAB 20-2260_Transport Properties of Plasmas with Tangled Magnetic Field
Leonov, Sergey	University of Notre Dame du Lac	Notre Dame, IN	Waves of Electric Charge Generated by Pulse Corona of Alternating Polarity
Levin, Deborah	Board of Trustees of the University of Illinois	Champaign, IL	Understanding the Role of Electrostatic Solitary Waves in Beam Neutralization
Li, Hui	Los Alamos National Laboratory	Los Alamos, NM	Stability and Propagation of Magnetically-Driven Jets in High-Beta Plasma Background -- Unique Opportunities with the WIPPL Facility
Locke, Bruce	Florida State University	Tallahassee, FL	Collaborative Research Proposal: Time Resolved Optical Emission Spectroscopy and Laser Induced Fluorescence of Nanosecond Pulsed Discharges in a Gas-Liquid Water Film Reactor
Macheret, Sergey	Purdue University	West Lafayette, IN	Kinetic Modeling and Experimental Studies of Capacitively Coupled Macro- and Microplasmas at Microwave Frequencies
Maddalena, Luca	The University of Texas at Arlington	Arlington, TX	NON-INTRUSIVE MEASUREMENTS USING FEMTOSECOND LASER IN ATMOSPHERIC PRESSURE PLASMA JET

Orlov, Dmitri	The Regents of the University of California - UCSD	La Jolla, CA	Hypervelocity impact in stellar media: heat shielding, shock fronts and ablation clouds
Spong, Donald	Oak Ridge National Laboratory (ORNL)	Oak Ridge, TN	Analysis of runaway electron driven whistler wave instability experiments
Stapelmann, Katharina	North Carolina State University	Raleigh, NC	Absolute Reactive Oxygen Species Densities in the Effluent of the COST Reference Source and Plasma-generated Atomic Oxygen Density Measurements in Liquid using TALIF
Starikovskiy, Andrey	The Trustees of Princeton University	Princeton, NJ	FS Laser control for high-voltage NS discharges
Vincena, Stephen	Regents of the University of California - Los Angeles	Los Angeles, CA	Species Mix & Distribution Function Dependence of Energetic Ion Driven Magnetospheric Instabilities on DIII-D
von der Linden, Jens	Lawrence Livermore National Laboratory	Livermore, CA	Investigating the Dynamics of Canonical Flux Tubes with a Canonical Vorticity Probe
Wang, Chuji	Mississippi State University	Mississippi State, MS	Optical trapping and manipulation of single particles for MDPingdown spectroscopy
Williams, Jeremiah	Wittenberg University	Springfield, OH	Measurement of the thermal effects in the dispersion relation of the dust acoustic wave in the presence of a magnetic field
Xu, Kunning	University of Alabama in Huntsville	Huntsville, AL	Deflection of Plasma by High Magnetic Fields at Variable Pressures
Zhang, Xuewei	Texas A&M University - Kingsville	Kingsville, TX	Sources of Primary Electrons in Nanosecond Pulsed Breakdown in Water