

**Collaborative Fusion Energy Research in the DIII-D National Program  
DE-FOA-0001762**

<b>Principal Investigator</b>	<b>Institution</b>	<b>Project Title</b>
Austin, Jr., Max	The University of Texas at Austin, Austin, TX, 78759-5316	DIII-D Collaboration: Contributions to Transport Studies and Electron Temperature Measurements in DIII-D Experiments
Brower, David	Regents of the University of California, Los Angeles, Los Angeles, CA, 90095-1406	Determining the role of nonlinear MHD in disrupting and hybrid-mode DIII-D tokamak plasmas
Chapman, Brett	Board of Regents of the University of Wisconsin System, Madison, WI, 53715-1218	Determining the role of nonlinear MHD in disrupting and hybrid-mode DIII-D tokamak plasmas
King, Jacob	Tech-X Corporation, Boulder, CO, 80303-1379	Computational exploration of DIII-D QH-mode with extended MHD
McKee, George	Board of Regents of the University of Wisconsin System, Madison, WI, 53715-1218	Fluctuation Diagnostics Development and Plasma Instability Research in Advanced Tokamak Plasmas on the DIII-D Tokamak
Meier, Eric	University of Washington, Seattle, WA, 98195-9472	SOLPS-ITER modeling of drift effects in DIII-D double-null AT configurations
Mordijck, Saskia	The College of William and Mary, Williamsburg, VA, 23187-8795	Core-Edge integration of particle transport for burning plasma conditions on DII-D
Rhodes, Terry	Regents of the University of California, Los Angeles, Los Angeles, CA, 90095-1406	Multi-field and multi-scale turbulence measurements and validation of predictive turbulence simulations in Advanced Tokamak DIII-D Plasmas

**Collaborative Research on International and Domestic Spherical Tokamaks  
DE-FOA-0001784**

<b>Principal Investigator</b>	<b>Institution</b>	<b>Project Title</b>
Anderson, Jay	Board of Regents of the University of Wisconsin System, Madison, WI, 53706-1390	Neutral Beam Injection and Auxiliary rf Heating Support in LTX- $\beta$
Crocker, Neal	The Regents of the University of California Los Angeles, Los Angeles, CA, 90095-7099	Advancing the physics basis for prediction and control of spherical tokamaks via experimental investigation of energetic ion driven instabilities and validation of simulations
Fonck, Raymond	Board of Regents of the University of Wisconsin System, Madison, WI, 53706-1609	An Integrated Study of Non-Solenoidal Startup for Spherical and Advanced Tokamaks
Hansen, Christopher	University of Washington, Seattle, Washington, 98195-2250	Reconstruction of plasma equilibrium and eddy current induced error fields in the Lithium Tokamak eXperiment- beta

Heidbrink, William	The Regents of the University of California, Irvine, Irvine, CA, 92697-7600	Fast-ion Diagnostics and Physics at MAST-Upgrade
Koel, Bruce	The Trustees of Princeton University, Princeton, NJ, 08544-0036	Erosion, re-deposition, and recycling of Li PFCs in LTX- $\beta$
Leonard, Anthony	General Atomics, San Diego, CA, 92121-1122	Divertor Physics and Control on the MAST-U Tokamak
Liu, Yueqiang	General Atomics, San Diego, CA, 91212-1122	3D Response and Control on the MAST-U Spherical Tokamak
Mahajan, Swadesh	The University of Texas at Austin, Austin, TX, 78712-1532	Collaborating with MAST-U in exploring Divertor and Pedestal Physics
Myra, James	Lodestar Research Corporation, Boulder, CO, 80301-2843	Scrape-off layer stability, turbulence and transport in MAST-U
Osborne, Thomas	General Atomics, San Diego, CA, 91212-1122	H-mode Pedestal, Integrated Modeling, and Model Validation on the MAST-U Tokamak
Raman, Roger	University of Washington, Seattle, Washington, 98195-2400	Optimization of Coaxial Helicity Injection to enable high-current start-up in Solenoid-less STs
Rhodes, Terry	The Regents of the University of California Los Angeles, Los Angeles, CA, 90095-1406	Turbulence and transport science on MAST-U: Magnetic and density turbulence, turbulence flow, GAMs, and zonal flows
Sabbagh, Steven	The Trustees of Columbia University in the City of New York, New York, NY, 10027-7922	Stability Research for Disruption Prediction and Avoidance in MAST-U Spherical Tokamak Plasmas
Zakharov, Leonid	LiFusion, Princeton, NJ, 08540-4366	Confinement, Plasma Boundary, and Equilibrium Reconstruction in LTX-beta in Presence of NBI

**Collaborative Research in Magnetic Fusion Energy Sciences on Long-Pulse International Stellarator Facilities**  
**DE-FOA-0001811**

<b>Principal Investigator</b>	<b>Institution</b>	<b>Project Title</b>
Demers, Diane	Xantho Technologies LLC; Madison, WI	An Ion Beam Probe to Advance Understanding of Electric Fields and Turbulence in the Wendelstein 7-X Stellarator
Maurer, David	Auburn University; Auburn, AL	Three-Dimensional Equilibrium and Stability and its Impact on Edge Transport and Divertor Performance in Wendelstein 7-X
Porkolab, Miklos	Massachusetts Institute of Technology; Cambridge, MA	Phase Contrast Imaging for Wendelstein 7-X
Schmitz, Oliver	University of Wisconsin; Madison, WI	Three-Dimensional Equilibrium and Stability and its Impact on Edge Transport and Divertor Performance in Wendelstein 7-X

Smith, David	University of Wisconsin; Madison, WI	A Feasibility Study for 2D Multi-Field Turbulence Measurements on Wendelstein 7-X with Fluctuation Beam Emission Spectroscopy
Terry, James	Massachusetts Institute of Technology; Cambridge, MA	Gas-Puff Imaging for Diagnosis of Boundary and Scrape-Off Layer Physics in Wendelstein 7-X

**Scientific Discovery through Advanced Computing: Runaway Electron Avoidance and Mitigation in Tokamak Plasmas**

**DE-FOA-0001844 / LAB 18-1844**

<b>Principal Investigator</b>	<b>Institution</b>	<b>Project Title</b>
Adams, Mark	Lawrence Berkeley National Laboratory (LBNL), Berkeley, CA 94720	Simulation Center for Runaway Electron Avoidance and Mitigation
Bhattacharjee, Amitava	Princeton Plasma Physics Laboratory (PPPL), Princeton, NJ, 08543-0451	Simulation Center for Runaway Electron Avoidance and Mitigation
Boozer, Allen	The Trustees of Columbia University in the City of New York, New York, NY, 10027-7922	Simulation Center for Runaway Electron Avoidance and Mitigation
Breizman, Boris	The University of Texas at Austin, Austin, TX, 78712-0262	Collaborative Research: Simulation Center for Runaway Electron Avoidance and Mitigation
Brennan, Dylan	The Trustees of Princeton University, Princeton, NJ, 08544-0036	Simulation Center for Runaway Electron Avoidance and Mitigation
del-Castillo-Negrete, Diego	Oak Ridge National Laboratory (ORNL), Oak Ridge, TN, 37831-6169	Simulation Center for Runaway Electron Avoidance and Mitigation
Lao, Lang	General Atomics, San Diego, CA, 92121-1122	SciDAC Simulation Center for Runaway Electron Avoidance and Mitigation 2 (SCREAM 2)
Tang, Xianzhu	Los Alamos National Laboratory (LANL), Los Alamos, NM 87545	Simulation Center for Runaway Electron Avoidance and Mitigation