

# Department of Energy Announces First Round of FY 2022 Public-Private Partnership Awards to Advance Fusion Energy

INFUSE 2022 First Round

List Posted: 7/6/2022

Principal Investigator	Title	Institution	City	State	9-digit zip code	Partnering Institution
Alex Creely	Characterization of Turbulent Transport and Confinement in ARC with STEP and CGYRO	Commonwealth Fusion Systems	Cambridge	MA	02139-4239	University of California, San Diego
Caroline Sorensen	Agile design workflow for plasma-facing fusion components with coupled thermofluidic and structural optimization	Commonwealth Fusion Systems	Cambridge	MA	02139-4239	Oak Ridge National Laboratory:
Christopher Chrobak	Assessing ELM mitigation by pellet triggering in SPARC low-collisionality discharges	Commonwealth Fusion Systems	Cambridge	MA	02139-4239	Oak Ridge National Laboratory:
Dina Yuryev	Machine learning assisted prediction of tungsten heavy alloy plasma facing component performance for fusion energy applications	Commonwealth Fusion Systems	Cambridge	MA	02139-4239	Massachusetts Institute of Technology
David Weisberg	Fuel Cycle and Tritium Plant Model for Fusion Pilot Plant	General Atomics	San Diego	CA	92121-1122	Savannah River National Laboratory
Colin McNally	Beyond Neoclassical Closures for MHD Simulation of General Fusion Devices via Kinetic Monte Carlo Calculations	General Fusion Corp.*	Oak Ridge	TN	37830-6526	Oak Ridge National Laboratory:
Kristin Skrecky	Tritium Fuel Cycle Modelling and Optimization to Enable Fusion Pilot Plant Development	General Fusion Corp.*	Oak Ridge	TN	37830-6526	Savannah River National Laboratory
Setthivoine You	Observing Density Evolution During Merging of Plectonemic Taylor states	Helicity Space Corporation	Pasadena	CA	91107-7346	Swarthmore College
Emil Ruskov	3D modeling of the Staged Z-pinch with the FLASH code	Magneto-Inertial Fusion Technologies, Inc.	Tustin	CA	92780-7032	University of Rochester
Hafiz Rahman	Hard x-ray imaging and characterization of staged z-pinch plasmas in order to exclude ion beams as cause of fusion	Magneto-Inertial Fusion Technology Inc.	Tustin	CA	92780-7032	California Institute of Technology
Chris Galea	Electron density profiles on PFRC with USPR	Princeton Fusion Systems, Inc.	Plainsboro	NJ	08536-2096	University of California, Davis
Michael Paluszek	Evaluating RF antenna designs for PFRC plasma heating and sustainment	Princeton Fusion Systems, Inc.	Plainsboro	NJ	08536-2096	Princeton Plasma Physics Laboratory
Stephanie Thomas	Stabilizing PFRC plasmas against macroscopic low-frequency	Princeton Fusion Systems, Inc.	Plainsboro	NJ	08536-2096	Princeton Plasma Physics Laboratory
Yifei Zhang	Performance-structure characterization to improve REBCO Fusion conductor production at SuperPower	SuperPower Inc.	Glenville	NY	12302-3410	Florida State University
Ales Necas	THz Radiation Generation to Enable Internal Magnetic Field Measurement of Burning Plasmas	TAE Technologies, Inc.	Foothill Ranch	CA	92610-2607	University of Rochester
Hiroshi Gota	Development of a High-Flux Inductive Spheromak Gun for FRC Formation via Counter-Helicity Merging	TAE Technologies, Inc.	Foothill Ranch	CA	92610-2607	Princeton Plasma Physics Laboratory
Mark Koepke	FLARED -- Flowing Lithium's Adsorption and Release Experiment for Deuterium	Tokamak Energy Inc.**	Bruceton Mills	WV	26525-5526	University of Illinois Urbana-Champaign
Conner Galloway	Simulation of Direct-Drive Hybrid Using Two Opposed Beams for Inertial Fusion Energy	Xcimer Energy	Foster City	CA	94404-3531	University of Rochester

Footnotes:

\*General Fusion is headquartered in Canada with a domestic subsidiary in Oak Ridge, TN.

\*\*Tokamak Energy is headquartered in the United Kingdom with a domestic subsidiary in Bruceton Mills, WV.