Name of the University	Points of Contact	Description of unique fusion expertise
Carnegie Mellon University	Sneha Prabha Narra	Additive Manufacturing for use in fusion environment
Columbia University in the City of New York	Carlos Paz-Soldan	Plasma equilibrium, stability, control
Drexel University	Fei Lu	Medium Voltage DC Power System, Medium Voltage DC Circuit Breaker
Lehigh University	Eugenio Schuster	Control-oriented Modeling, Advanced Plasma Control, Machine Learning
MIT	Markus Buehler, Zack Cordero, Sara Ferry	Expertise in materials design, failure/fracture, MD, ML, and related modeling methods, Selection, fabrication, and testing of high-temperature materials, Materials, tritium b
Swarthmore College	Michael Brown	SSX lab for merging studies. Diagnostic development. MHD simulations using Dedalus and XSEDE.
Texas A&M University	Stephen Raiman	high temperature materials and molten salt compatibility
UC Berkeley	Raluca Scarlat	FLiBe tritium breeding blanket, tritium, molten salts, materials and chemistry
UC San Diego	George Tynan	Turbulence and transport; edge and SOL physics; plasma-material interactions; energy systems
UCLA	Troy Carter	Expertise in fusion plasma physics (MFE and ICF), fusion technology, Particle-in-cell simulation of plasmas, high temperature plasma diagnostics, plasma waves (e.g. ICF
University of Maryland	Ronald Walsworth, Amanda Stein	Development of diamond magnetometers to operate within fusion reactor
University of Nebraska-Lincoln	Jun Wang	Semiconductor packaging technology for solid-state circuit breakers in fusion applications
University of North Texas	Vijay K Vasudeva, Rajarshi Banerjee, Narendra Dahotre, Rajiv Mishra, Sundeep Mukherjee	Materials and manufacturing for fusion energy systems
University of Pittsburgh	Wei Xiong, Albert To	Advanced materials design, and expertise is in advanced manufacturing of high-performance alloys including additive manufacturing
University of Rochester	Dr. Sean Regan, Dr. Chris Deeney, Dr. Mike Campbell	modeling and simulation of plasmas, THZ,optical, x-ray, neutron and particle diagnostics, tritium science and engineering, solid state lasers (from nsec to fsec), optical mat
University of Rochester	Jonathan Davies, Chad Forrest, Vladimir Glebov, Walter Shmayda	Neutron diagnostics, tritium handling
University of Tennessee - Knoxville	Livia Casali	Boundary and pedestal physics. Tokamak experiments (design, execution, analysis), numerical modeling such as SOLPS-ITER, EIRENE, STRAHL etc. Radiative and det
University of Tennessee, Knoxville	David Donovan	Boundary Plasma Physics; Impurity Transport; Heat Flux Diagnostics; Plasma-Material Interactions
University of Wisconsin-Madison	Tim Bohm	The UW-Madison fusion neutronics group has decades of fusion neutronics design and analysis of both MFE and IFE fusion systems such as ARIES, ITER, FNSF, JET, a

**Detailed contact information for the above can be found on the protected sharepoint site in the documents folder.

reeding and blankets, vacuum vessel design

RF), laser-plasma interactions, fusion materials and PMI, design and construction of experimental hardware. Unique experimental facilities are available (e.g. the Large Plasma Device, Phoenix Laser Lab)

terials (linear and non-linear), optical coatings, gratings, material response (damage) to high power lasers

ached divertors, divertor optimization and pedestal, impurity transport, innovative core-edge integration solutions.

nd HAPL. Neutronics analysis includes modeling of systems ranging from simple homogenized 1-D models to highly detailed CAD based 3-D models. Analysis includes responses such as tritium breeding, primary displacement damage (dpa), H/He gas production, and nuclear heating. Additional lly, activation responses such as specific activity, transmutation, decay heat, radioactive waste disposal ratings, and shutdown dose rate are also treated. We have developed extensive open source software to facilitate and improve the neutronics workflow including the DAG-MC software package which allows radiation transport codes such as MCNP and OpenMC to directly transport in CAD geometry. This allows reactor designers to maintain a CAD based workflow and better interoperate with common finite element engineering codes such as ANSYS. A key aspect of our neutronic