Institute for Fusion Studies University of Texas, Austin



Job Opening October 2023

Postdoctoral Research in Physics at The University of Texas at Austin

The Institute for Fusion Studies (IFS) in the Physics Department at the University of Texas at Austin is looking for a qualified person to fill an experimental Postdoctoral Associate position at the DIII-D tokamak. Qualified candidates will have received a PhD in Physics or a related field and have a background in experimental plasma physics. The postdoctoral position involves the use of electron cyclotron emission (ECE) diagnostics applied to fusion plasma research. The instruments are used to measure the plasma electron temperature $T_{\rm e}$, and $T_{\rm e}$ perturbations, to infer energy transport and auxiliary heat deposition and to measure millimeter wave emission in a variety of tokamak plasma scenarios. In particular, the research has a strong focus on Negative Triangularly Scenario on the DIII-D tokamak. The work has the possibility of collaboration with IFS theorists specializing in MHD and gyrokinetic simulation and analysis who are engaged in theory-experiment comparison.

Experience with microwave diagnostics is a plus but is not required. The responsibilities of this position will include maintaining and operating the ECE systems, close participation in experiments, leading of experiments, analysis of data using advanced numerical techniques, writing and publishing results in scientific journals, and oral presentations of results. The worksite will be the DIII-D National Fusion Facility located in San Diego, CA. Interested applicants should send a letter of interest, a current CV, and two letters of reference to Dr. Austin at max.austin@utexas.edu.