

## Jobs at LLNL

### Job Description

<b>Posting Title:</b>	POST DOCTORAL RESEARCH STAFF MEMBER	<a href="#">Return to Job Postings</a>	<a href="#">Select Job</a>
<b>Job #:</b>	009051		
<b>Posted Date:</b>	05/12/2010		
<b>Job Title:</b>	Post-Dr Research Staff Member (220.0)		
<b>Job Term:</b>	Post-Doctoral		
<b>Salary Range:</b>	Open		
<b>Organization:</b>	9855 Physics		
<b>Directorate:</b>	Physical and Life Sciences		

NOTE: This is a two-year term appointment with the possibility of extension to a maximum of three years. Eligible candidates are recent PhDs within five years of the month of the degree award at time of employment offer.

#### NATURE AND SCOPE OF JOB

The Physics Division within the Physical and Life Sciences (PLS) Directorate has an opening for a postdoctoral research staff member in the area of edge plasma and plasma-surface interaction computer simulations for magnetic-fusion-energy devices. The research includes working with a team to improve physics understanding of edge plasma behavior in present-day tokamaks through a combination of existing measurements on the National Spherical Torus Experiment (NSTX) and numerical simulations. The selected candidate's specific responsibilities will be utilizing plasma codes, initially fluid-based, and possibly kinetic at a later stage, in support of experiments. Strong interaction with NSTX experimentalists is expected.

In addition to comparison with experimental data, physics model development is part of the work plan. The position will utilize state-of-the-art computing facilities and offer interaction with the LLNL Fusion Energy Program's theory and computational staff. Will report to the Principal Investigator for this project and the Associate Program Leader for Magnetic Fusion Energy Theory and Computations. The applicant's work location will be Princeton Plasma Physics Laboratory, Princeton, NJ.

#### ESSENTIAL DUTIES

- Perform edge plasma simulations and provide physics understanding of results.
- Work as a team member to compare simulation and existing experimental data, and provide modeling support for on-going experiments.
- Develop and implement new physics models.
- Publish research results in peer-reviewed scientific or technical journals and present results at external conferences, seminars and/or technical meetings.
- Ensure all assignments are performed in accordance with ES&H, security, and business practice requirements and policies.

#### ESSENTIAL SKILLS, KNOWLEDGE, AND ABILITIES

- Recent PhD in physics or related field.
- Knowledge of basic plasma physics.
- Experience conducting simulations in computational physics.
- Documented publication record in peer-reviewed journals.
- Experience carrying out independent research.
- Demonstrated verbal and written communication skills necessary to work in a multidisciplinary team environment, author technical and scientific reports and publications, and deliver scientific presentations.
- Experience working independently and in a team environment to achieve program goals in a timely fashion.

#### SPECIAL REQUIREMENTS

Pre-Placement Medical Exam: None required

Pre-Employment Drug Test: External applicants selected for this position will be required to pass a post-offer, pre-employment drug test.

Anticipated Clearance Level: None

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