Postdoctoral position in the Bellan Plasma Group (posted Dec 9, 2019)

- Recent Ph.D. degree in Experimental Plasma Physics or closely related field
- Preferred experience: X-ray imaging techniques, coded aperture methods, general plasma diagnostics, pulsed power operation, fast data acquisition, measurement of low-level signals in an extremely noisy environment
- Required knowledge: optics, imaging, plasma physics, numerical techniques for data analysis, electronics, vacuum techniques, experiment design
- General: Excellent oral and written communication skills

This position is to participate in construction, deployment, operation, and analysis of a new X-ray imaging diagnostic. A coded aperture imaging system for radiation that cannot be focused using conventional optical methods will be constructed and demonstrated to work with X-rays in the multi-kilovolt range. After testing at Caltech, this system will be fielded on pulsed, intermediate-density fusion experiments elsewhere. The spatial location of the X-ray will be measured. This will be done in association with a graduate student who has already done significant initial work. Prototypes will be tested at Caltech before being used elsewhere.

Publications reporting previous work at Caltech on this are:


Appointment is for one year with extension to second year if performance satisfactory.

Applicants should submit the following to Professor Paul M. Bellan (pbellan@caltech.edu)

1. Short paragraph explaining interest in position and giving evidence of suitability
2. Resume
3. Names of three references

Detailed information on the Bellan group is at http://www.bellanplasmagroup.caltech.edu/