



The Laboratory of Excellence Plasmas in Paris
LABEX PLAS@PAR, University Pierre et Marie CURIE
4 place Jussieu, 75005 Paris, FRANCE

Vacancy at LABEX PLAS@PAR

Three years fixed term vacancy, from May 2014

Conception and experimental techniques engineer.

PLAS@PAR is a laboratory of excellence that federates leading plasma scientists in the Paris area, working in different scientific sectors. PLAS@PAR stimulates fundamental research in plasma physics and promotes innovation in domains ranging from nanotechnology to environment, aeronautics and security as also in the areas of environmental protection and medicine.

Context and mission :

The engineer will work directly with teams whose activities are centered on fundamental processes that occur in hot plasmas. They belong to the Laboratoire de Chimie Physique-Matière et Rayonnement (LCPMR), the Institut des NanoSciences de Paris (INSP) and the Laboratoire pour l'Utilisation des Lasers Intenses (LULI). The engineer will be based in the LCPMR.

The engineer will take care of the conception and the development of an innovative experimental setup on X-ray photon detection in the energy range from 2 to 5 keV. This instrumentation will include a multi-crystal spectrometer combined to a fast position sensitive detector leading to high detection efficiency allowing for coincidence measurements with other particles and high resolving power.

Core Activities :

The engineer will have to analyze the scientific needs of the different teams involved, to conceive the instrument, and to evaluate and propose the techniques that should be used. He will develop the methods of measurements, write the specifications, to organize the progress in the achievement, manage the measurements, and organize the installation, the dismantling and the travel of the setup between the different laboratories as well as at the large facilities where test experiments will be performed (particle accelerators, synchrotron radiation facilities, free electron lasers).

Skills :

The engineer should have a good knowledge in **physics** (Atomic and Molecular Physics), in science and techniques for engineer, more specifically in the **domain of X-ray photon detection**. Skills in **ultra high vacuum technologies, experimentation and measurement** are required.

The engineer should have a **good level in english** (spoken and written), should know how to work in a team and will have to adapt himself to the constraints of experimental research.

Contacts

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