ESRF The European Synchrotron

Looking for a new challenge in Science?

Join the ESRF, the European Synchrotron!

The ESRF, the European Synchrotron, is an international research facility based in Grenoble, France. Thanks to high-level, innovative engineering and cutting-edge vision, the ESRF is recognised as one of the top research institutions worldwide, welcoming more than 6 500 scientists every year in fields such as biology, medicine, chemistry, earth and environmental sciences, cultural heritage, materials and surface science, and physics. The ESRF is supported by 21 countries and employs 600 staff.

We are currently seeking to recruit a:

Post-doctoral Fellow

within the EUCALL project at the beamline BM05

Time-limited position ref. EUPD244

JOB DESCRIPTION

Within the EUCALL project (https://www.eucall.eu/), the ESRF BM05 team is in charge of developing and commissioning a new instrument for X-ray pulse wavefront metrology. This instrument is part of a larger package aiming at providing new optical X-ray diagnostic instruments for Free-Electron Laser, Laser Wakefield Acceleration and synchrotron radiation based X-ray sources. Researchers of the instrumentation beamline BM05 have investigated and validated an X-ray speckle based metrology concept fulfilling the requirements imposed for the analysis of a pulsed beam. In collaboration with other EUCALL partners they are in charge of developing a fully functional prototype instrument.

You will develop numerical routines for calibration and image processing as needed for the recovery of the X-ray pulsed wavefront from speckle dual images. You will conduct experimental campaigns both at ESRF beamlines and at partner institutes.

Further information may be obtained from Sebastien Bérujon (<u>berujon@esrf.fr</u> tel.: +33(0)476882318) and Eric Ziegler (<u>ziegler@esrf.fr</u> tel. +33(0)476882170).

PROFILE, SKILLS AND EXPERIENCE

- PhD in physics, mathematics or materials science obtained less than 3 years ago
- Programming skills are mandatory, particularly in C/C++ or Python on UNIX architecture
- Experience in optics, imaging or good experimental skills are desirable
- Synchrotron radiation experience would be considered an asset
- You must be capable of integrating a multidisciplinary, international research project team
- Proficiency in English (working language at the ESRF)

WORK CONDITIONS

Contract of 18 months, renewable for a further 6 to 18-month period. The annual gross salary will be 41,8 k€ and additional allowances may apply. The ESRF is an equal opportunity employer and encourages diversity.

If you are interested in this position, please apply on http://www.esrf.fr/Jobs by 08 May 2016.