



Elettra Sincrotrone Trieste

Postdoctoral Position for T-REX Laboratory at FERMI

Deadline: 7 February 2020

Ref: DB/20/2

Company description

Elettra Sincrotrone Trieste is an international multidisciplinary research center operated as a user facility, featuring a 2.0/2.4 GeV, third-generation synchrotron light source (Elettra), a new free-electron laser light source (FERMI) and a variety of support laboratories. The extremely high quality of the machines and beamlines has set new performance records and has been producing results of great scientific and technological interest. See <http://www.elettra.eu> for more information.

Beamline/Activity/Project description

The T-ReX Laboratory (<https://www.elettra.eu/it/lightsources/labs-and-services/t-rex/t-rex.html>) at Elettra-Sincrotrone Trieste S.C.p.A. is the facility for table-top time-resolved spectroscopies at FERMI. It is open to users and is complementary to the FERMI FEL. The spectroscopies available include an advanced endstation for Time and Angle Resolved Photoelectron Spectroscopy (TR-ARPES) with 6 eV, 11 eV and HHG ultrafast probes and a wide variety of time-resolved optical spectroscopies with photon energies ranging from the UV to the mid-IR.

Job description

The successful candidate will be part of the T-ReX team and will operate, commission and develop the T-ReX spectroscopies and end-stations. Furthermore, he/she will contribute in setting up pump-probe experiments involving the use of the ultrafast laser sources, the optical spectroscopies, the TR-ARPES endstation and the HHG source. Additionally, he/she will take part in the experimental activity of the T-ReX team as well as assist external users. He/she will be also encouraged to establish his/her own research projects and collaborations with the users community.

Qualifications

A Ph.D. in Physics, Chemistry or a related discipline together with experience in ultrafast laser sources, time-resolved techniques and ultrafast photoelectron spectroscopies are required. Experience with pump-probe experiments and two-photon photoemission is also mandatory. Familiarity with ultra-high-vacuum equipment and familiarity with experiments at large scale facilities (synchrotrons and FELs) would be an asset. A suitable knowledge of the working principles of ultrafast lasers, of non-linear optical devices, of harmonics generation techniques and spin-resolved measurements is desirable. Research experience in the physics of materials science (correlated, organic, magnetic) is required, while numerical analysis expertise would be considered a bonus.

Ability to prioritize, to interact with staff at all levels and to work as part of a multi-disciplinary team is required. Good oral and written communication skills in English are essential.

The deadline for the submission of the application is February 7, 2020.

The appointment envisioned is a fixed term contract of an initial duration of 12 months. The salary will be commensurate with previous experience and qualifications of the candidate.

Applications should include a full curriculum vitae, the names and contact information (including electronic mail) of at least two references.

We thank all applicants in advance.

For more information, please contact Federico Cilento (email: federico.cilento@elettra.eu).

To apply for this position please visit the following link:

<https://www.elettra.trieste.it/it/about/careers/working-withus.html?ref=DB%2F20%2F2>

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