



The Paul Scherrer Institute is a centre for multi-disciplinary research and one of the world's leading user laboratories. With its 1400 employees it belongs as an autonomous institution to the ETH domain and concentrates its activities on solid-state research and materials sciences, elementary particle physics, energy and environmental research as well as biology and medicine.

The Swiss Light Source (SLS) at the Paul Scherrer Institute is a third-generation synchrotron light source, offering unique research opportunities to academic research teams as well as industrial research groups. It hosts several laboratories where world-leading research is conducted in an interdisciplinary and stimulating environment with excellent infrastructure.

Within the framework of a project we develop new concepts of coherent imaging techniques in the extreme ultraviolet (EUV) range and explore their applications. To strengthen our rapidly growing team, we are looking for a

PhD Student

Lensless Imaging (Algorithm development)

Your tasks

- Development of lensless microscopy concepts using coherent diffraction imaging techniques at short wavelengths (deep UV, extreme UV, soft X-rays) in reflection mode.
- Development new theoretical approaches and translate them in usable algorithms.
- Simulations with existing software and algorithms.
- Analysis of experimental data and contributing to experimental efforts.

Your profile

You have a Masters level degree in science or engineering and have a keen interest in applied research in microscopy. You are a highly motivated team player and would like to pursue a PhD project with main focus on algorithms and partly experimental. Experience in some of the following fields will be of advantage: optics, holography, imaging, electromagnetics, modeling, scattering techniques, working in a Linux environment, advanced programming skills in C/C++, Python, and Matlab. The student will enroll the graduate school at ETH Zurich.

For further information please get in touch with: Dr. Yasin Ekinci,
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Please submit your application to: Paul Scherrer Institut, Human Resources, ref. code 6212, Elke Baumann, 5232 Villigen PSI, Switzerland, elke.baumann@psi.ch.
Further job opportunities: www.psi.ch