

The Paul Scherrer Institute is with 1300 employees the largest research centre for the natural and engineering sciences in Switzerland and a worldwide leading user laboratory. Its research activities are concentrated on the three main topics of solid-state physics, energy and environmental research as well as human health.

The Microscopy and Magnetism Group at the Swiss Light Source (SLS) studies the electronic and magnetic properties of thin films and multilayer systems and operates two beamlines at the SLS. Within a module of the Swiss Nanoscience Institute (SNI) in Basel we study the properties of nanomagnets with X-rays and are searching for a

PhD Student

Individual nanomagnets studied with X-rays

Your tasks

- Conduct experiments on nanomagnets using a microscope (PEEM) and/or an XMCD endstation at the SIM beamline and explore the possibility of time-resolved measurements and the interaction with femtosecond laser pulses
- To reveal the secrets of how the finite dimensions change the intrinsic properties of single nanomagnets compared to the bulk and how individual nanomagnets couple to multifunctional surfaces
- Collaborate with internal colleagues on other experiments at the SIM or PoLux beamlines and with colleagues from the Laboratory for Micro and Nanotechnology and from the Swiss Nanoscience Institute (SNI) in Basel

Your profile

You hold a Master in physics, material science, nanoscience or a related field and enjoy practical work. Knowledge of magnetism, solid state or surface physics would be of benefit. As an enthusiastic researcher you like to work within a small team. You will be registered as a PhD Student at the University of Basel and your main working place will be the Paul Scherrer Institut, Villigen, Switzerland.

For further information please contact: Prof. Dr Frithjof Nolting, phone +41 56 310 51 11,
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Please submit your application to: Paul Scherrer Institut, Human Resources, Ref. code 6313-02, Miriam Zehnder, 5232 Villigen PSI, Switzerland or to: miriam.zehnder@psi.ch

