The Paul Scherrer Institute PSI is the largest research centre for natural and engineering sciences within Switzerland. We perform cutting-edge research in the fields of matter and materials, energy and environment and human health. By performing fundamental and applied research, we work on sustainable solutions for major challenges facing society, science and economy. PSI is committed to the training of future generations. Therefore about one quarter of our staff are post-docs, post-graduates or apprentices. Altogether PSI employs 2100 people.

The Laboratory for Mesoscopic Systems, based at the PSI, is a joint laboratory between the ETH Zurich and the PSI. One scientific focus of the group is to study artificial spin systems consisting of arrays of magnetically-coupled nanomagnets. To expand our current research on artificial spin systems we are looking for a

PhD Student

Ultrafast processes in magnetic nanostructures

Your Tasks

- To conduct outstanding research in the field of ultrafast processes at sub picosecond timescales in magnetic nanostructures
- To fabricate nanostructures with electron beam lithography
- To study ultrafast processes with a lab-based setup and x-ray free electron lasers
- Perform computer simulations of the magnetization dynamics

Your Profile

Excellent qualifications with a master degree in physics, material science or related area and enjoy practical work. Knowledge of magnetism, x-ray methods, nanofabrication and programming skills for data analysis is beneficial. As an enthusiastic researcher you like team work and have a flexible approach to working between different laboratories.

We offer

Our institution is based on an interdisciplinary, innovative and dynamic collaboration. You will profit from a systematic training on the job, in addition to personal development possibilities and our pronounced vocational training culture. If you wish to optimally combine work and family life or other personal interests, we are able to support you with our modern employment conditions and the on-site infrastructure.

For further information, please contact Dr Valerio Scagnoli, email valerio.scagnoli@psi.ch.

Please submit your application online (including list of publications and addresses of referees) for the position as a PhD student (index no. 3701-01): https://www.psi.ch/en/pa/job-opportunities/45314-phd-student

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