

Postdoctoral Position in Theoretical Nanomagnetism and Spin Dynamics

Applications are invited for a postdoctoral position in Theoretical Nanomagnetism and Spin Dynamics in the condensed matter theory group at the Science Institute of the University of Iceland (SIUI), in Reykjavík, under the supervision of Dr. Pavel F. Bessarab. The research activities of the group include theory of magnetism, electronic structure theory, and spin dynamics theory.

The appointment is for **two years** starting preferably in April 2018.

Project summary

The successful applicant will be involved in the development of a theoretical framework for the optimal control of magnetization switching and design of new solutions for efficient, low-power data processing and data recording based on magnetic media. The project requires analytical calculations in combination with numerical work and programming. The project will be conducted in close collaboration with Dr. D.V. Berkov (General Numerics Research Lab, Jena, Germany) and Prof. S. Heinze (Kiel University, Kiel, Germany). Extended visits to their groups are anticipated within the project. Further information about the project and the theoretical condensed matter group at SIUI can be found at <https://sites.google.com/view/pavelbessarab>.

Person qualifications

Essential:

- A Ph.D. degree in relevant area of physical sciences.
- Expertise in the theory of micromagnetism and/or atomistic spin dynamics.
- Knowledge of at least one of the following programming languages: C, C++, Fortran.

Desirable:

- Experience in the development of software packages for micromagnetics and/or atomistic spin dynamics simulations.
- Knowledge of computational and numerical methods.
- Good publication record.
- Experience in supervision of students.

Application

Interested candidates should include in their application a **curriculum vitae**, **list of publications**, a **statement of research interests** and contact information of **two** senior researchers that can provide **letters of recommendation**. Applications should be sent directly to Pavel Bessarab, bessarab@hi.is.

The deadline for applications is **April 6, 2018**.

For further information, please contact Pavel Bessarab, bessarab@hi.is.