

## **Ph.D. Position in Theoretical Nanomagnetism and Spin Dynamics**

At the School of Engineering and Natural Sciences, University of Iceland.

We are looking for a highly motivated Ph.D. student for theoretical work in the field of nanomagnetism and spin dynamics. The project will be carried out 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 cover theory of magnetism, electronic structure theory, and spin dynamics theory.

The Ph.D. position is limited to **three years** of full-time studies. No coursework is required if the student has already completed 60 ECTS after B.S. studies. The position can start as early as **June 1**.

### **Project summary**

The successful applicant will be involved in the development of 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. Two internships for an extended time are planned in the group of Prof. S. Heinze (Kiel University, Kiel, Germany) and group of Dr. D.V. Berkov (General Numerics Research Lab, Jena, Germany). 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:**

- An M.S. degree in relevant area of the physical sciences.

#### **Desirable:**

- Knowledge of computational and numerical methods.
- Knowledge of programming.

### **Application**

Interested candidates should include in their application a **curriculum vitae**, **personal statement** describing scientific interests and motivation for pursuing a Ph.D. degree and contact information of **two** senior researchers that can provide **letters of recommendation**. Applications should be sent directly to Pavel Bessarab, [bessarab@hi.is](mailto:bessarab@hi.is).

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

**For further information**, please contact Pavel Bessarab, [bessarab@hi.is](mailto:bessarab@hi.is).