



The **Vienna School of Mathematics (VSM)** is a joint graduate school of the mathematics faculties of the **University of Vienna** and the **TU Wien**. The VSM is devoted to top-level PhD education in all branches of mathematics. It fosters intra- and interdisciplinary scientific cooperation and networking among students and advisors and aims at increasing the international visibility of the Vienna area as a center for mathematics.

The VSM currently announces up to three PhD position in the area of

### **Landau-Lifshitz-Gilbert Equation (Technische Universität Wien, Supervisors: Michael Feischl / Dirk Praetorius)**

The potential PhD topics deal with various aspects of the so-called Landau-Lifshitz-Gilbert equation (LLG), which is a nonlinear time-dependent PDE like structure-preserving finite element discretization and adaptivity, coupling to other PDEs in a multiphysics setting, existence and strong-weak uniqueness of solutions to coupled LLG systems, uncertainty quantification for stochastic LLG, and machine learning approaches. We announce up to 3 PhD positions funded by the Austrian Science Fund FWF through the special research program „Taming Complexity in PDE Systems“ (SFB F65) within the project part „Coupling in Computational Micromagnetics“.

[https://sfb65.univie.ac.at/#!/public/project\\_parts/?project\\_part=8](https://sfb65.univie.ac.at/#!/public/project_parts/?project_part=8)

The basic requirement for the position is a good working knowledge in at least one of the fields connected to the project: solid knowledge of functional analysis, analysis of PDEs, numerical analysis, uncertainty quantification.

The advertised position is associated with the Institute of Analysis and Scientific Computing of the Technische Universität Wien in the Research Area Numerical Analysis. The successful candidate will become a member of the Vienna School of Mathematics and is expected to actively contribute to its activities. The extent of employment is 30 hours per week. The positions can start as soon as possible.

#### **Application Requirements and Procedure**

The candidates must have a master degree (or equivalent) in Mathematics at the moment the PhD position starts. The application documents should contain a letter of motivation; the scientific CV with publications list; higher education certificates/diplomas; and letter(s) of recommendation preferably sent directly to [dirk.praetorius@asc.tuwien.ac.at](mailto:dirk.praetorius@asc.tuwien.ac.at) by the person writing the letter. Applications have to be sent to [dirk.praetorius@asc.tuwien.ac.at](mailto:dirk.praetorius@asc.tuwien.ac.at), if possible in a single PDF file. The deadline for applications is **April 21, 2023**.