



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 a PhD position in the area of

### **Numerical Methods for Nonlocal Operators (Technische Universität Wien, Supervisor: Markus Melenk)**

The potential PhD topics involve the realization of high order numerical methods for multidimensional fractional operators and the error analysis of the methods. It is funded by the Austrian Science Fund FWF through the special research program "taming complexity in PDE systems" (SFB 65). More details can be found at [https://sfb65.univie.ac.at/#!/public/project\\_parts/?project\\_part=6](https://sfb65.univie.ac.at/#!/public/project_parts/?project_part=6).

The basic requirement for the position is a good working knowledge in at least one of the fields connected to the project, in particular numerical methods for and/or analysis elliptic partial differential equations. A plus is prior exposure to matrix compression or tensor-structured techniques in numerical linear algebra.

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 successful candidate will also be associated with the SFB 65 and included its activities. The position will 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 [melenk@tuwien.ac.at](mailto:melenk@tuwien.ac.at) by the person writing the letter. Applications have to be sent to [melenk@tuwien.ac.at](mailto:melenk@tuwien.ac.at), if possible in a single PDF file. The deadline for applications is **April 21, 2023**.