

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 PhD positions in the area of

PDE Modeling of Material Growth (University of Vienna, Supervisor: U. Stefanelli)

The project focuses on the mathematical modeling of growth processes, which play a central role in biological, natural, and technological systems. These problems involve time-evolving, a priori unknown domains and often take the form of free boundary problems. The research aims to expand the methodological toolbox for analyzing such processes, drawing on techniques from calculus of variations, partial differential equations, and viscosity solutions. At the same time, applications will be investigated.

We offer up to two Ph.D. positions in this research area. Potential projects include the analysis of PDEs on growing domains and accretive fronts, mathematical modeling of growth in complex systems, and control and optimization of growth in PDE-driven processes. The specific thesis project(s) will be developed collaboratively with the successful applicant(s).

A strong background in partial differential equations and calculus of variations is required for these positions.

The advertised positions are associated with the Research Group on Applied Mathematics and Modeling (U. Stefanelli) at the Faculty of Mathematics of the **University of Vienna**. The successful candidate(s) will become a member/members of the Vienna School of Mathematics and is/are expected to actively contribute to its activities. The extent of employment is 30 hours per week. The two positions are planned to start on April 1, 2026 and June 1, 2026 respectively, or as soon as possible thereafter.

Application Requirements and Procedure

The candidates must have a master degree (or equivalent) in Mathematics at the moment the PhD position starts. The application should include a letter of motivation, a scientific CV with a list of publications, copies of higher education certificates and diplomas, and the names of two potential referees who may be contacted for a recommendation letter (no letters need to be submitted at the time of application). Applications have to be sent to appl.math@univie.ac.at, if possible in a single PDF file. The deadline for applications is **November 30, 2025**.