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 announces a three-year PhD position in the area of

Model Order Reduction for Electromagnetic Wave Propagation (TU Wien, Supervisor: Fernando Henríquez)

The doctoral research will focus on the development and mathematical analysis of model order reduction methods for time-dependent electromagnetic scattering problems using boundary integral equations. It will address the construction of efficient numerical algorithms with rigorous convergence guarantees, their extension to shape-parametric problems and uncertainty quantification, and the implementation and numerical validation of the proposed methods. The position is funded by the Austrian Science Fund (FWF) through the project "*Advancing Uncertainty Quantification and Model Order Reduction for Computational Electromagnetics*" (Project number PAT1779526).

The basic requirements for the position are a strong background in numerical analysis and partial differential equations, together with good C++ programming skills.

The advertised position is associated with the Institute for Analysis and Scientific Computing at TU Wien. 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, for a duration of three years. The intended starting date is March 2027.

Application Requirements and Procedure

Candidates must hold a Master's degree (or equivalent) in Mathematics, Applied Mathematics, or a related field by the starting date of the PhD position. Application documents should include a detailed academic CV, a letter of motivation, degree certificates and academic transcripts, and the names and contact details of two academic referees. Applications should be sent directly to fernando.henriquez@asc.tuwien.ac.at, ideally as a single PDF file. The deadline for applications is **December 31st, 2026**.