



# Dissertationen und Diplomarbeiten in technischer Mathematik

## Positions for PhD and MSc students in applied/technical mathematics in the **START project** *PDE Models for Nanotechnology*

Positions for PhD students (Dissertanten) and MSc students (Diplomanden) are available in the **START project “PDE Models for Nanotechnology”** lead by Clemens Heitzinger at the Institute for Analysis and Scientific Computing at TU Vienna. The START project provides top-level education in applied and numerical mathematics.

The topic of the project are deterministic and stochastic **partial differential equations** (PDEs), multiscale and homogenization problems, the development of efficient numerical methods, and various timely applications in nanotechnology. The goal is to develop the basic mathematical models and simulation codes to enable theoretical understanding of various applications.

We collaborate with leading researchers in Europe and the US (Arizona State University, Cambridge, Columbia, Imperial College London, Oxford, and Yale). Funding for **extended collaborative visits** is available.

**Requirements:** I am looking for **excellent, ambitious students** who are close to their MSc degree and are looking for a thesis advisor.

For the PhD positions (**Dissertanten**), a master’s degree in applied/technical mathematics is required. The successful candidate should have an excellent background and a keen interest in applied/technical mathematics, **partial differential equations**, and/or **numerical methods** for partial differential equations. **Programming skills** (Matlab, Mathematica) are required. The working language is German or English.

For the MSc positions (**Diplomanden**), a keen interest in partial differential equations and programming skills (Matlab, Mathematica) are required.

**Salary:** The positions for PhD students include **regular employment contracts** and are paid according to the FWF salary guidelines (see link below). The PhD positions are limited to three years with possible extensions. MSc students are also supported according to FWF guidelines. **Funding for conference visits and extended international collaborative visits** is available.

**Inquiries and applications:** PhD students: please send your CV, your degree certificates, a transcript (Sammelzeugnis), and a letter of motivation. MSc students: please send your CV and a transcript (Sammelzeugnis). Optional: list of publications, recommendation letters. Please send the documents to Prof. Dr. Clemens Heitzinger (Clemens.Heitzinger@TUWien.ac.at, Clemens.Heitzinger@ASU.edu). If you have any **questions** about these positions, please also write to this address. Applications will be accepted until the positions are filled.

**Further information:** <http://Clemens.Heitzinger.name/>,  
<http://www.start-portal.at/die-starter/y660/index.html>,  
<http://www.fwf.ac.at/de/projects/personalkostensaetze.html>.

**Questions?** Write to [Clemens.Heitzinger@TUWien.ac.at](mailto:Clemens.Heitzinger@TUWien.ac.at) or [Clemens.Heitzinger@ASU.edu](mailto:Clemens.Heitzinger@ASU.edu).