

HiWi / Thesis Opening

Prof. Johannes Maly Group for “Mathematical Data Science” at the Chair for Mathematical Foundations of AI LMU Munich

We are currently looking for master (or advanced bachelor) students to join our team and work at the intersection of mathematics, computer science, and physics. In a joint project with the start-up [Linque](#), we are developing computing algorithms for a novel analog computing architecture based on light. Coherent computation based on this architecture enables two key advantages over conventional computing hardware in the form of several times faster calculations while also being two orders-of-magnitude more energy efficient. The research project will encompass exploration of linear algebraic algorithm development and simulations with the possibility to be involved in their implementation on actual physical hardware.

What you should bring:

- strong theoretical background in linear algebra and numerical analysis
- curiosity about algorithms, software programming and computer architecture
- experience in Python or a comparable language
- enjoy working on your own project as well as in a team environment

What we offer:

- learn about variety of exciting topics (simulations, algorithm complexity theory, electronic circuit design, ...)
- be part of an open-minded, diverse and dynamic team; flexible working structure
- advance the scientific understanding with potential publications/patents and, for LMU students, the option to write your M.Sc. or B.Sc. Thesis (in mathematics or computer science) on the project outcome
- 1 year contract for 8-10h/week

If this piques your interest and you would like to learn more or apply, please contact me via email describing your motivation in a few sentences and attaching your CV and a recent transcript of records. We are looking forward to your application!

Contact Details:

Prof. Johannes Maly

Email: maly@math.lmu.de

[Research Group Website](#)