

Student needed!

Join the Finnish Academy Fellowship project "Geometric Methods in Elasticity" led by Dr. Aleksis Koski. The project is looking to hire a highly motivated student member as part of the team, starting from the academic year 2023-2024 and lasting up to four years.



Requirements. This recruitment is mainly aimed towards people nearing the completion of their master's studies. The project is open to applicants who are already concluding their master's degree and are seeking a PhD student position, but we also encourage motivated individuals looking to complete their master's degree in the academic year 2023-2024 to apply for an apprenticeship as well. In such cases, if you haven't yet chosen a topic for your master's thesis Aleksis will gladly provide you with a suitable topic at your earliest convenience.

During the project period (which lasts until 31.8.2027) you can expect full funding for your PhD studies under Dr. Aleksis Koski as well as travel funding for conference visits and other academic trips.

Project area. The project "Geometric Methods in Elasticity" specializes in the interplay between geometry, topology, and analysis within the study of the mathematical models that govern the behaviour of elastic bodies. Though our underlying motivation comes from trying to understand natural phenomena, this is a project in **pure mathematics** that combines ideas from areas such as *Geometric Function Theory*, *The Calculus of Variations*, *PDE's*, and *Complex Dynamics* to solve simple-to-state but challenging-to-solve problems in the field of *Nonlinear Elasticity* such as:

When can we approximate a homeomorphism in the Sobolev space $W^{1,p}$ with diffeomorphisms?

As part of the project, expect to take a deep dive into these areas and be part of creating new topological and geometric methods to solve open problems that tie in to contemporary research topics in analysis.

Applying. To apply for the position, please E-mail your information to Aleksis at aleksis.koski@gmail.com along with a CV and/or a brief description of yourself and why you would be suitable for the position. Further inquiries may be sent by E-mail as well.