

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 a PhD position in the area of

**Large scale geometry and lattices in Lie groups
(University of Vienna, Supervisor: S. Dave)**

This project is at the intersection of differential geometry and operator theory, with applications to geometric group theory. The key motivation is to understand the large-scale geometry of Lie groups and their discrete subgroups and apply it to the analysis of these groups.

Possible Ph.D. projects is to connect the large-scale geometry of the group with the geometry, topology and higher index theory. The project will focus on semisimple Lie groups and their discrete subgroups. Here we will rely on new techniques from parabolic geometry and hypoelliptic operators to have a fresh look at some classical problems.

The basic requirement for the position(s) is a good working knowledge of differential geometry. Additionally we require a solid background knowledge in Lie Groups and in global analysis.

The advertised position is associated with the Faculty of Mathematics of the **University of Vienna**. 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. The position will start on October 1, 2021.

Application Requirements and Procedure

The candidates must have a master degree (or equivalent) in Mathematics at the moment the PhD position starts. The application documents should contain a letter of motivation; the scientific CV with publications list; higher education certificates/diplomas; and letter(s) of recommendation preferably sent directly to office@vsmath.at by the person writing the letter. Applications have to be sent to office@vsmath.at, if possible in a single PDF file. The deadline for applications is **May 10, 2021**.