



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

Valuations on Convex Functions (Technische Universität Wien, Supervisor: M. Ludwig)

The geometric theory of valuations on convex bodies is a classical part of geometry. The paradigmatic result in this field is Hadwiger's celebrated classification theorem, where a complete classification of rigid motion invariant valuations (that is, finitely additive functions) on convex bodies is established and a characterization of intrinsic volumes is obtained. The main aim of the proposed research is to develop a corresponding theory for valuations on spaces of convex functions including its applications.

Possible Ph.D. projects are on the integral geometry on spaces of convex functions, on classification results of valuations and on analytic inequalities. The concrete thesis project will be developed jointly with the successful applicant.

The basic requirement for the position is a good working knowledge in at least one of the fields connected to the project: convex geometry, convex analysis, calculus of variations.

The advertised position is associated with the Institute of Discrete Mathematics and Geometry of the Technische Universität Wien in the Research Group Convex and Discrete Geometry of Prof. Monika Ludwig. 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, 2022.

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 edith.rosta@tuwien.ac.at by the person writing the letter. Applications have to be sent to edith.rosta@tuwien.ac.at, if possible in a single PDF file. The deadline for applications is **April 30, 2022**.