



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

Lattice Paths combinatorics and discrete harmonic functions (TU Wien, Supervisor: M. Drmota)

Lattice path combinatorics, in particular in the quarterplane, has been and still is a "hot topic" in enumerative combinatorics. It has strong interactions with algebraic, geometric and probabilistic methods. The purpose of this PhD project is to connect it also with analytic methods and properties such as discrete harmonic functions that appear in the coefficients of the asymptotic expansions of the corresponding counting problems.

The advertised position is associated with the Institute of Discrete Mathematics and Geometry of **TU Wien** in the Research Group on Combinatorics and Algorithms of Prof. Dr. Michael Drmota. 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 November 1, 2020.

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. Applications have to be sent to katharina.pauschenwein@tuwien.ac.at. The deadline for applications is **October 20, 2020**.