



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

Discrete geometric structures motivated by applications and architecture (TU Wien, Supervisor: C. Müller)

Contemporary architecture often realizes more or less complicated free-form geometry (in form of roofs, facades, etc). In many cases the underlying structure/segmentation is involved with deep mathematical concepts, and in particular, with discrete mathematics and discrete geometry. In recent years a very fruitful exchange of ideas has been established between such applications and the mathematical discipline of discrete differential geometry.

Within that framework we will systematically investigate (discrete) geometric structures - many of which being motivated by architecture. Our focus will lie on discrete structures in classical geometries such as Lie sphere geometry and others. A possible direction is the investigation of various types of nets, e.g., in their respective projective models, and thereby particularly focusing on invariant face elements.

The advertised position is associated with the Institute of Discrete Mathematics and Geometry of **TU Wien** in the Research Group on Applied Geometry of Ass.-Prof. Dr. Christian Müller. 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 as soon as a suitable candidate has been found.

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 barbara.triebl-kraus@tuwien.ac.at by the person writing the letter. Applications have to be sent to barbara.triebl-kraus@tuwien.ac.at, if possible in a single PDF file. The deadline for applications is **May 10, 2021**.