

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

**Collective Dynamics: From Individual-Based Models to Continuum Equations
(University of Vienna, Supervisor: Sara Merino-Aceituno)**

In this project, we will examine open mathematical problems related to explaining emergent dynamics in collective motion, applying tools from kinetic theory. This includes questions regarding stationary behaviour in such systems, as well as the characterisation of phase transitions in group behaviour. It will involve interacting-particle systems, asymptotic analysis and analysis of partial differential equations.

This project will be co-supervised by Sara Merino-Aceituno (University of Vienna) and Amic Frouvelle (Université Paris Dauphine). The student will be based in Vienna.

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 is planned to start on September 1, 2026 or later, by agreement.

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 via the Job Center of the University of Vienna. The application is not open yet but it will be soon. The deadline for application is **March 11, 2026**.