

The **Vienna School of Mathematics (VSM)** is a joint graduate school of the mathematics faculties of the **University of Vienna** and **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

### **Descriptive Set Theory (University of Vienna, Supervisor: B.D. Miller)**

*Descriptive set theory concerns the structure of definable (e.g., Borel) subsets of the real numbers, and has substantial connections with many other areas of mathematics, such as combinatorics and ergodic theory. The main topic of this thesis project is definable graph theory, its implications for other areas of descriptive set theory, and applications to other areas of mathematics. Particular areas of interest include (but are not limited to) dichotomy theorems and the base of the Borel reducibility hierarchy.*

*Candidates should have a solid background in classical descriptive set theory.*

The advertised position is associated with the Faculty of Mathematics of the **University of Vienna** in Professor Benjamin Miller's descriptive set theory group. 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, 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; a scientific CV including a list of publications; higher education certificates/diplomas; and letters of recommendation. Applications are to be submitted through the Job Center of the University of Vienna at the [Reference number 10813](#). The deadline for applications is **July 1, 2020**.