





5th VSM Call for Applications (Deadlines: November 22, 2021/December 6, 2021)

1. Up to four PhD positions financed by the VSM (University of Vienna); application deadline November 22

For these positions (directions for) PhD projects have been proposed. Applications are only possible for specific projects from the list. List of projects (in alphabetical order):

- 1. Stability of Word Maps, with Applications (Supervisor: Goulnara Arzhantseva)
- 2. Expander Graphs, with Applications (Supervisor: Goulnara Arzhantseva)
- 3. <u>Towards a Geometric Understanding of the Space of Stochastic Processes</u> (Supervisors: Julio Backhoff-Veraguas, Mathias Beiglböck)
- 4. Topics from the Langlands Program (Supervisors: Harald Grobner, Alberto Mínguez)
- 5. <u>Low-rank Tensor Decompositions in Scientific Machine Learning</u> (Supervisors: Vladimir Kazeev, Philipp Petersen)
- 6. <u>Combinatorics</u> (Supervisor: Christian Krattenthaler)
- 7. An Analytic Approach to Tensor Field Tomography (Supervisor: Otmar Scherzer)
- 8. <u>Rare Events Probabilistic Laws from Deterministic Dynamics</u> (Supervisor: Roland Zweimüller)
- 2. NoMASP: Nonsmooth Nonconvex Optimization Methods for Acoustic Signal Processing (Austrian Academy of Sciences, Supervisor: P. Balazs; University of Vienna, Supervisor: R. Bot); application deadline December 6
- **3. Regularisation of Differential Equations by Random Processes** (TU Wien, Supervisor: M. Gerencsér); **application deadline December 6**