



The **University of Bonn** is an international research university offering a broad range of subjects. With a 200-year history, some 33,000 students, more than 6,000 employees and an outstanding reputation in Germany and abroad, the University of Bonn is one of the leading universities in Germany and has been awarded the status of a University of Excellence.

The new Hertz-Chair “**Mathematics, Modeling and Simulation of Complex Systems**” within the Transdisciplinary Research Area “Modelling” ([TRA 1](#)) is looking to fill the following position **with effect from August 1, 2024** on a fixed-term contract for a period of **3 years**

## Research Assistant (100%)

Join the newly established team of Prof. László Végh at the Hertz Chair in TRA1 that studies fundamental questions at the crossroads of mathematical optimization, theoretical computer science, mathematical economics, and game theory. We are dynamic, multi-cultural, and inclusive team, and have links to the Hausdorff Center for Mathematics, the Research Institute for Discrete Mathematics, the Institute of Computer Science, and the Institute for Microeconomics. Our research topics include efficient algorithms for linear and convex programming and their geometric aspects, equilibrium computation in games and markets, resource allocation and fair division problems, approximation algorithms, network optimization, and problems at the interface of optimization and machine learning.

- Your tasks:
- Conduct research on topics in mathematical optimization, theoretical computer science, mathematical economics, or game theory, preferably with a focus on interactions between these areas
  - Contribute to the transdisciplinary research agenda, in collaboration with other members of the team and other academics at the University of Bonn
  - Active participation in research seminars, conferences, and workshops
  - Contribution to academic teaching (4 SWS).
- Your profile:
- University Degree (Master) in Mathematics, Computer Science, Operations Research, Economics, or other relevant areas
  - Previous research experience in one of these disciplines
  - Fluent English skills
  - Committed to a transdisciplinary research agenda, flexible, and team-oriented.
- We offer:
- A diverse and demanding job with one of the largest employers in the region, interdisciplinary and transdisciplinary research to obtain a PhD
  - An inspiring research environment linked to multiple research institutes
  - Freedom and flexibility in the research focus and style with mentoring support
  - Integration into the structured doctoral program at HCM
  - participation in a university-wide pension system (VBL)
  - access to the extensive university sports program
  - an excellent transport infrastructure with the opportunity to obtain a discounted employee ticket for public transportation (VRS) or to use assigned, affordable parking
  - [Remuneration in accordance with TV-L pay grade 13].

The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university and aims to increase the proportion of women employed in areas where women are under-represented and to promote their careers. To that end, it urges women with relevant qualifications to apply. Applications will be handled in accordance with the *Landesgleichstellungsgesetz* (State Equality Act). Applications from suitable candidates with a certified disability or equivalent status are particularly welcome.

If you are interested in this position, please send your application documents including a cover letter outlining your previous research experiences and research interests, a curriculum vitae and certificates by April, 5, 2024 **with the application code 3.3/2024/08 in a single PDF file** by e-mail to the Hertz-Professur “**Mathematics, Modeling and Simulation of Complex Systems**”, TRA 1 **Modelling** by the Research Institute for Discrete Mathematics by [lvegh@uni-bonn.de](mailto:lvegh@uni-bonn.de). Please address any questions regarding the position described to Prof. Végh ([lvegh@uni-bonn.de](mailto:lvegh@uni-bonn.de)).