



# Modern Methods in the Calculus of Variations

**Organizers:**

Alice Marvoggio (University of Bonn), Antonio Tribuzio (University of Bonn), Konstantinos Zemas (University of Bonn)

**Venue:** Lipschitz Lecture Hall · Mathematics Center · Endenicher Allee 60 · 53115 Bonn

In the last years, the variational study of materials has drawn upon new advancements in important mathematical approaches and techniques, including for instance peridynamics, Young measures, or discrete-to-continuum analysis. These advanced methods are considered by now fundamental in the Calculus of Variations applied to materials, but still constitute a very active field of research.

The aim of this school is to bring together experts in the field to provide PhD students and early-career researchers with an introduction to the most modern techniques in the variational study of materials. In addition to the mini-courses and research talks, there will be time for interesting discussions, as well as the opportunity for participants to present their own posters!

**Lecture Series by:**

- Andrea Braides (Università di Roma Tor Vergata)
- Irene Fonseca (Carnegie Mellon University)
- Carolin Kreisbeck (KU Eichstätt-Ingolstadt)
- Xavier Lamy (Université de Toulouse)

**Additional talks by:**

- André Guerra (University of Cambridge)
- Leonard Kreutz (TU München)
- Theresa Simon (Universität Münster)
- Anna Skorobogatova (ETH Zürich)



**Call for participation:** Participation is free. If you are interested in participating, please fill out the application form at the following link: <https://math-events.uni-bonn.de/event/573/>. Successful applicants are selected based on research background. To be considered, please submit a CV and research overview. To encourage the participation of researchers facing increased financial burden, such as many researchers from developing countries, a small number of funded places are available (including support for travel and/or accommodation). You can indicate in the application form, for which type of financial support you would like to be considered. Additional participants are welcome to join at their own cost.

**The deadline for applications to participate in the school is November 15, 2025 (CET).**