

Jerónimo García-Mejía

Karlsruher Institut für Technologie
Karlsruhe, Germany
jeronimo.garcia@kit.edu
<https://jeronimomaths.github.io>

Education

- 2020–current **Ph.D. Candidate in Mathematics**, *Karlsruhe Institute of Technology (KIT)*, Karlsruhe, Germany, Expected in July 2024.
Supervisor: Jun.-Prof. Claudio Llosa Isenrich
- 2020 **M.Sc. in Mathematics (Grade 1.8)**, *University of Bonn*, Bonn, Germany.
Thesis: *Group actions on hyperbolic spaces (Grade 1.0)*
Supervisor: Prof. Dr. Ursula Hamenstädt
- 2018 **B.Sc. in Mathematics (Grade 9.3 out of 10)**, *Universidad Nacional Autónoma de México (UNAM)*, Mexico City, Mexico.
Thesis: *Constructions of Classifying Spaces* (in Spanish)
Supervisor: Prof. Carlos Prieto.

Awards and Scholarships

- 2022- current Ph.D. Scholarship from the Research Training Group (RTG) "Asymptotic Invariants and Limits of Groups and Spaces", *funded by the DFG (German Research Association)*, KIT.
- 2018–2020 Scholarship from the Rosa Luxemburg Stiftung, *Germany*.

Scientific Talks

- May 2023 **Lightning Talk**, *Conference Geometry of subgroups*, Thematic program on Geometric Group Theory, Centre de Recherches Mathématiques, Montréal.
- February 2023 **Lightning Talk**, *Young Geometric Group Theory XI*, Münster, Germany.
- October 2022 **The Geometry of the Word Problem**, *Baby Geometri Seminar*, University of Pisa - Scuola Normale Superiore, Pisa, Italy.
- January 2022 **Bestvina-Brady Morse theory**, *GCD Seminar*, Karlsruhe Institute of Technology, Karlsruhe, Germany.
- February 2021 **Group actions, hyperbolic spaces and small cancellation**, *AG Seminar Metric Geometry*, Karlsruhe Institute of Technology, Karlsruhe, Germany.
- May 2020 **Group actions on hyperbolic spaces**, *Junior Geometry Seminar*, Heidelberg University, Heidelberg, Germany.

Preprints

- [1] J. García-Mejía, C. Llosa Isenrich, and G. Pallier. *On the Dehn functions of central products of nilpotent groups*. arXiv:2310.11144. Oct. 2023.

Other work containing original research

- 2020 *Group actions on hyperbolic spaces*, Master Thesis, University of Bonn, Unpublished.

Teaching Experience

My teaching experience covers preparing exercise-sheets, presenting solutions in front of the class, and grading. All of this in Spanish, English, and German.

Teacher's Assistant at the KIT

- Winter 2021/22 *Elementare Geometrie (Elementary Geometry)*, Bachelor course in German.
Summer 2021 *Geometric Group Theory*, Master course in English.
Winter 2020/21 *Proseminar Geometrie: Knotentheorie (Knot theory)*, Bachelor Seminar in German.

Teacher's Assistant at UNAM

- Winter 2017 *Analytical Geometry I and Topology I*, (Bachelor's courses in Spanish).

Service

- April 2022 Organizer of the RTG "Asymptotic Invariants and Limits of Groups and Spaces" Seminar: *Group (co)homology, KIT and Heidelberg University*, Germany.
October 2021 - September 2022 Speaker of the RTG "Asymptotic Invariants and Limits of Groups and Spaces", *KIT and Heidelberg University*, Germany.

Conference attendance

- June 2023 *Cube complexes and combinatorial group theory*, Thematic program on Geometric group theory, Centre de Recherches Mathématiques, Montréal.
June 2023 *Groups around 3-manifolds*, Thematic program on Geometric group theory, Centre de Recherches Mathématiques, Montréal.
May 2023 *Geometry of subgroups*, Thematic program on Geometric group theory, Centre de Recherches Mathématiques, Montréal.
February 2023 *Young Geometric Group Theory XI*, WWU Münster, Münster, Germany.
July 2022 *MSRI-Oxford Summer Graduate School "Metric Geometry and Geometric Analysis"*, Oxford University, Oxford, Great Britain.
June 2022 *Hyperbolic groups and their generalizations*, Institut Henri Poincaré, Paris, France.
March 2022 *Topological and Homological Methods in Group Theory 2022*, Bielefeld University, Bielefeld, Germany.
February 2022 *Workshop on Finiteness properties*, Karlsruhe Institute of Technology, Karlsruhe, Germany.

Languages

- Spanish **Mother tongue**
English **102 TOEFL-iBT**
German **B1 Goethe-Zertifikat**