Personal Details

Birth 23th of July, 1992 — Aracaju, Brazil

Languages Portuguese (native), English (fluent), Spanish (intermediate), German (intermediate) Email raraujo@impan.pl — robertosanaraujo@gmail.com

Education

Academic Degrees

- 2020–2024 **Doctor in Mathematics**, *advised by Prof. Dr. Christoph Böhm*, University of Münster, Germany.
- 2018–2020 **Master of Mathematics**, Instituto de Matemática Pura e Aplicada (IMPA), Rio de Janeiro, Brazil.
- 2015–2018 Bachelor of Mathematics, University of Brasília, Brazil.

Complementary Education

2016–2018 **Programa de Ensino Tutorial** - **Matemática**, (Undergraduate program for the initiation to research in mathematics, teaching assistance and outreach) University of Brasília, Brazil.

List of preprints and publications

Finite time existence of Ricci flows on a family of homogeneous spaces, Preprint (2025), https://arxiv.org/abs/2507.05097

Long-time behavior of awesome homogeneous Ricci flows, Pacific Journal of Mathematics 331-2 (2024), 187-215, https://doi.org/10.2140/pjm.2024. 331.187

On the isometry group of immortal homogeneous Ricci flows, *The Journal* of *Geometric Analysis*, vol. 34, no. 173 (2024), https://doi.org/10.1007/s12220-024-01609-6

Scholarships and Employment

- Jan 2025 Visiting Researcher, *invited by Luis Florit*, Institute for Pure and Applied Mathematics (IMPA), Rio de Janeiro, Brazil
- 2024–Present Assitant Professor (Postdoc), Institute of Mathematics of the Polish Academy of Sciences (IMPAN), Warsaw, Poland.
 - 2020–2024 **Employed as Wissenschaftlicher Mitarbeiter for my doctoral studies**, *as part of the Cluster of Excellence Mathematics Münster*, University of Münster.
 - 2018–2020 **Full CNPq scholarship for pursuing a Master's studies in Mathematics**, Instituto de Matemática Pura e Aplicada (IMPA), Rio de Janeiro, Brazil.
 - 2016-2018 CAPES scholarship for participating in the Programa de Ensino Tutorial -Matemática, University of Brasília, Brazil.

Conferences and Seminars

- 2025 **Speaker**, *Differential Geometry Seminar*, Institute of Mathematics of the Polish Academy of Sciences (IM PAN), Warsaw, Poland.
- 2025 Short talk, Workshop "Complex Geometry and Lie Groups", Osaka, Japan.
- 2025 **Speaker**, *Differential Geometry Seminar*, Instituto de Matemática Pura e Aplicada (IMPA), Brazil.
- 2024 Speaker, Differential Geometry Seminar, University of São Paulo, Brazil.
- 2024 **Attendee**, *Séminaire de Mathématiques Supérieures Flows and Variational Methods in Riemannian and Complex Geometry: Classical and Modern Methods*, Montreal, Canada.
- 2024 Short talk, Symmetry and Geometry in South Florida, Miami, USA.
- 2024 **Speaker**, *Oberseminar Geometric Analysis, Differential Geometry and Relativity Theory*, University of Tübingen, Germany.
- 2022–2023 **Organizer**, *Graduate Seminar on Differential Geometry*, University of Münster, Germany
 - 2023 Attendee, Workshop on Curvature and Global Shape, Münster, Germany.
 - 2023 Attendee, Workshop on Geometric Flows and Applications, Edinburgh, Scotland.
 - 2023 Attendee, Banach Center Oberwolfach Graduate Seminar: Geometry and Topology of Compact Homogeneous Spaces, Bedlewo, Poland.
 - 2023 Poster presented, Summer school: Geometric Analysis and PDEs, Checiny, Poland.
 - 2022 **Poster presented**, Virtual ICM Satellite Conference Differential Geometry and its Applications, Hradec Králové, Czech Republic.
 - 2022 Attendee, Geometrie, Oberwolfach Workshop, MFO, Oberwolfach-Walke, Germany.
 - 2022 Short talk, Young Women in Geometric Analysis, Bonn, Germany.
 - 2021 Poster presented, Workshop on Curvature and Global Shape, Münster, Germany.
 - 2018 Attendee, International Congress of Mathematicians ICM, Rio de Janeiro, Brazil.
 - 2018 Local organizer, XI Congress Grupo de Análisis Funcional y Ecuaciones de Evolución (GAFEVOL), Brasília, Brazil.

Awards and Honors

2020 Travel grant, to participate in the 8th Heidelberg Laureate Forum.

Teaching Experience

- 2022 **Teaching Assistant**, *Lie groups*, master's program in mathematics, University of Münster, Germany.
- 2018 **Undergraduate Teaching Assistant**, *Introduction to Measure and Integration Theory*, University of Brasília, Brazil.
- 2017 Undergraduate Teaching Assistant, Geometry I, University of Brasília, Brazil.