JUAN MANUEL LORENZO NAVEIRO

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EMPLOYMENT

- FPI Fellow of the Spanish Ministry of Science and Innovation, Department of Mathematics, Universidade de Santiago de Compostela (September 2021 – Present).
- Research Technician, Department of Mathematics, Universidade de Santiago de Compostela (January – August 2021).

EDUCATION

- PhD in Mathematics (ongoing), Universidade de Santiago de Compostela (September 2021 – Present).
- Master's degree in Mathematics, Universidade de Santiago de Compostela (Average grade: 10/10) (September 2020 – July 2021).
- Graduate in Mathematics, Universidade de Santiago de Compostela (Average grade: 9.96/10) (September 2016 – July 2020).

RESEARCH INTERESTS

- Submanifold geometry on manifolds with symmetry: Lie groups, isometric actions on homogeneous and symmetric spaces, polar actions, homogeneous foliations, isoparametric hypersurfaces, totally geodesic and minimal submanifolds.

PREPRINTS

- J. C. Díaz-Ramos, J. M. Lorenzo-Naveiro: Codimension two polar homogeneous foliations on symmetric spaces of noncompact type, `arXiv:2302.08339` (pending publication).
- J. M. Lorenzo-Naveiro, I. Solonenko: Sections of polar actions, `arXiv:2111.05280`.

WORK IN PROGRESS

- A. Rodríguez-Vázquez, J. M. Lorenzo-Naveiro: Minimal submanifolds of Gray spaces.
- J. M. Figueroa-O'Farrill, J. M. Lorenzo-Naveiro: $(3,2)$-Lie algebras and coisotropy one homogeneous spacetimes.

TALKS AT CONFERENCES

- Differential Geometry and its Applications, University of Hradec Králové, 17 – 22 July 2022. *Polar homogeneous foliations on symmetric spaces of noncompact type.*
- Workshop on manifolds with symmetries, Universität Stuttgart, 28 – 31 March 2022. *Polar actions on some noncompact symmetric spaces.*
- Symmetry and Shape, Universidade de Santiago de Compostela (Spain), 15 – 18 October 2021. *Polar homogeneous foliations on* $\mathsf{SL}(3,\mathbb{R})/\mathsf{SO}(3)$.

POSTERS

- Symmetry and Shape, Universidade de Santiago de Compostela (Spain), 13 – 16 October 2022, *Codimension two polar homogeneous foliations on noncompact symmetric spaces.*

TALKS AT SEMINARS

- Geometry seminar, KU Leuven (Belgium), 19 May 2023, *Polar homogeneous foliations on noncompact symmetric spaces.*
- Symmetric spaces seminar, online seminar, 2 February 2022, *Symmetric spaces of noncompact type I: The Cartan and Iwasawa decompositions.*
- Symmetric spaces seminar, online seminar, 1 December 2021, *Introduction to polar actions.*
- Introduction to research seminar, Universidade de Santiago de Compostela (Spain), 24 February 2021, *The geometry of the Heisenberg group.*

RESEARCH STAYS

- University of Edinburgh (United Kingdom), 19/06/2023 – 28/07/2023.
- KU Leuven (Belgium), 01/05/2023 – 26/05/2023.
- Instituto de Ciencias Matemáticas – ICMAT-CSIC (Spain), 01/09/2020 – 03/11/2020.

GRANTS AND AWARDS

- Grant of the National Programme for the Formation of Research Personal (FPI). Ministry of science and innovation, September 2021 – Present.
- Severo Ochoa – Introduction to Research Grant. ICMAT, CSIC (Spain), September 2020 – November 2020.
- Graduation Award. Xunta de Galicia (Spain), 2020.
- Extraordinary end of degree award. Universidade de Santiago de Compostela (Spain), 2020.
- Collaboration grant. IMAT, Universidade de Santiago de Compostela (Spain), year 2019–2020.
- Academic excellence prize. Xunta de Galicia, year 2018 – 2019.
- Academic excellence prize. Xunta de Galicia, year 2017 – 2018.

ADVISORSHIP OF STUDENTS

- Undergraduate thesis of Tomás Rodríguez Vázquez, titled *Global theory of curves.* Universidade de Santiago de Compostela, 18/07/2023.

OTHER PUBLICATIONS

- J. M. Lorenzo-Naveiro, *Polar homogeneous foliations on symmetric spaces*, in *Publicaciones del Departamento de Geometría y Topología* **149**, Universidade de Santiago de Compostela (2022) (This is my M. Sc. thesis).
- J. M. Lorenzo-Naveiro, *The geometry of the Heisenberg group*, in *As matemáticas do veciño, Actas do Seminario de Iniciación á Investigación*, Institute of Mathematics, Universidade de Santiago de Compostela (2021), ISSN: 2171-6536 (Expository article on sub-Riemannian geometry).

ATTENDED COURSES

- *The Ambrose-Singer Theorem*, Universidade de Santiago de Compostela, October – November 2021.
- *Representation theory of compact groups*, Universidade de Santiago de Compostela, September – December 2020.
- *Knots and braids*, ICMAT, September 2020.
- *Homotopy of embedding spaces*, ICMAT, September 2020.
- *Fiber bundles and connections*, Universidade de Santiago de Compostela, February – May 2020.
- *International Masterclasses – hands on particle physics*, Universidade de Santiago de Compostela, March 2016.

ORGANIZED EVENTS

- Co-organizer of the conference *Matemáticas: habelas, hainas! 2023*, Universidade de Santiago de Compostela, 23/11/2023 (conference for the dissemination of Mathematics).
- Co-organizer of the PhD students seminar *Seminario de Iniciación á Investigación* and editor of the proceedings, Universidade de Santiago de Compostela, September 2023 – Present.

TEACHING EXPERIENCE

- *Topology of surfaces*. Degree in Mathematics (3rd year), Universidade de Santiago de Compostela, 2023/2024.
- *General topology*. Degree in Mathematics (3rd year), Universidade de Santiago de Compostela, 2022/2023, 2023/2024.
- *Global theory of surfaces*. Degree in Mathematics (3rd year), Universidade de Santiago de Compostela, 2021/2022.
- *Mathematics and Statistics II*. Degree in Pharmacy (1st year), Universidade de Santiago de Compostela, 2021/2022, 2022/2023, 2023/2024.
- *Mathematics*. Degree in Biotechnology (1st year), Universidade de Santiago de Compostela, 2021/2022, 2022/2023, 2023/2024.

LANGUAGES

- Native languages: Spanish and Galician.
- Fluent in English (Cambridge CAE, Level C2).
- Basic skills in French (DELF A2).