

Juan Paucar

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Education

- Sept'2020– **PhD in Pure Mathematics.**
August'2025 Institut de Mathématiques Jussieu-Paris Rive Gauche(IMJ-PRG)
Advisor: Romain Tessera
- Sept'2019– **M2 (Second year of the Master) Mathématiques et Applications(AAG).**
Aug'2020 Université Paris-Sud,
Orsay, France
- Jan'2017– **M.Sc. in Mathematics.**
Feb'2019 Instituto Nacional de Matematica Pura e Aplicada (IMPA)
Rio de Janeiro, Brazil
- Aug'2011– **B.Sc. in Mathematics.**
Dec'2016 Universidad Nacional de Ingeniería
Lima, Peru

Mémoire

- 2020 **Mémoire de M2 Université Paris Sud.**
Dehn functions in nilpotent groups.
Advisor: Romain Tessera

Preprints

- 2024 Isoperimetric Profiles and regular embeddings of locally compact groups. Submitted
- 2024 Growth of cocycles of isometric representations in Banach spaces. joint work with Antonio Lopez Neumann, soon to be finished

Talks

- Dec 2024 Arbre de Noël of the GDR Non Commutative Geometry at Orleans: Growth of cocycles on isometric Banach representations
- Nov 2024 IMJ-PRG Ergodic Theory Reading Group: Growth of cocycles on isometric Banach representations
- July 2024 Workshop on Orbit Equivalence at Besse en Chandesse: Regular Embeddings and Measured Equivalence of Locally compact groups
- June 2024 IMJ-PRG Preprint Seminar: Regular Embeddings and Measured Equivalence of Locally compact groups
- Feb 2022 ENS Group Theory Seminar: Coarse Embeddings and Quantitative Measured Equivalence of Locally compact groups
- Dec 2021 Reading Group Geometric Measure Theory Orsay: The Federer-Fleming deformation theorem for flat chains

Conferences Attended

- Dec 2024 Arbre de Noel, Meeting of the GDR Non Commutative Geometry, Orleans
- July 2024 Rencontre Equivalence Orbitale Besse-en-Chandesse, Clermont Ferrand
- July 2022 Workshop on Geometric Analysis and Group Theory, Oxford

- May 2022 Workshop on Operator Algebras, Groups and Dynamics, CIRM, Marseille
- Sept 2021 Geometry in Non-positive Curvature and Kähler Groups, IHES, Bures sur Yvette.
- April 2022 "Groups Acting on Fractals, hyperbolicity and self-similarity" a thematic trimester at Institut Henri Poincaré, Paris
- June 2021 Geometric Group Theory without Boundaries II, Virtual
- October 2020 Measured and Geometric Group Theory, Rigidity, Operator Algebras, CIRM, Marseille
- May 2020 Virtual Geometric Group Theory conference by the CIRM, Marseille

Other Experiences

- 2020 Jury in Iberoamerican Mathematical Olympiad, Lima Peru(Virtual Mode)
- 2018 International Congress of Mathematicians (ICM) at Rio de Janeiro, Brazil
- 2016 Sampling Advanced Mathematics for Minority Students(SAMMS) at Ohio State University, Courses of Topology, Real Analysis and Algebra with my final presentation on the Alexander polynomial
- 2015 Aritmetica, Grupos y Analisis (AGRA II), an ICTP/CIMPA funded school at Universidad Nacional de San Antonio Abad del Cusco, (UNSAAC), Courses of Additive Combinatorics, Geometric Expanders and Introduction to elliptic curves, Cusco, Peru
- 2012 Jury in 23 Olimpiada Matematica de Paises del Cono Sur, Lima, Peru
- 2011-2016 Jury in Olimpiada Nacional Escolar de Matematica(*National Mathematical Olympiad*)

Skills

- 1 $\text{\LaTeX}$

Awards

- 2019 Sophie Germain Scholarship from the Jacques Hadamard Foundation(**FMJH**)
- 2012 Silver Medal. 27th Iberoamerican Mathematical Olympiad, Bolivia
- 2011 Bronze Medal. 52th International Mathematical Olympiad, Netherlands
- 2011 Honorific Mention. 4th Romanian Master in Mathematics, Romania
- 2010 Gold Medal. 25th Iberoamerican Mathematical Olympiad, Paraguay

Languages

- 1 **Spanish**, *Native Language*.
- 2 **English**, *Fluent*.
- 3 **Portuguese**, *Intermediate*.
- 4 **French**, *Fluent*.