

Arturo Jaime

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Research Interests

Noncommutative Geometry, Index Theory, C^* -Algebras, Algebraic Topology, and K-Theory.

Education

2019 - Pres **University of Hawai'i at Mānoa**
Graduate Assistant, Mathematics (expected Ph.D May 2025)
Doctoral Advisor: Rufus Willett

2015 - 2019 **Arizona State University**
B.S. in Mathematics, May 2019
Honors Thesis: "On the Admittance of Frames in Hilbert C^* -Modules" (2019)
Thesis Advisor: Steve Kaliszewski; Committee: Jack Spielberg, Konrad Aguilar

Research

A. Jaime and R. Willett, "Complexity Rank for C^* -algebras". Münster Journal of Mathematics 16 (2023), 51-94. Preprint: [arXiv: 2205.04704](https://arxiv.org/abs/2205.04704).

Invited & Contributed Talks

- 2023 *Finite Complexity Rank for C^* -algebras*, Noncommutative Geometry Seminar, Texas A&M University, College Station, USA. April 19, 2023.
math.tamu.edu/seminars/noncomgeom
- 2022 *Complexity Rank One and K-Theory of C^* -algebras*, YMC^{*}A, University of Oslo, Oslo, Norway. August 8-12, 2022.
mn.uio.no/math/research/events/conferences/ymcstar2022
- 2021 *Noncommutative Dimensions, Decomposability and K-Theory*, GOALS Seminar, Online. May 27, 2021

Conferences & Workshops Attended

- 2023 July 3 - July 7, 2023: Noncommutative Geometry, Index Theory and Representation Theory, University of Kyoto, Kyoto, Japan
indico.math.cnrs.fr/event/8330/
- 2023 June 12 - June 16, 2023: Noncommutative Geometry Festival 2023, Washington University in St. Louis, St. Louis, USA
math.wustl.edu/~ylsong/NCG2023
- 2023 May 8 - May 12, 2023: Noncommutative Geometry along the North Sea Workshop, Hausdorff Center for Mathematics, Bonn, Germany
hcm.uni-bonn.de/events/eventpages/2023/ws-noncomm/description/
- 2023 May 2 - May 5, 2023: Hausdorff School: Noncommutative Geometry and Operator Algebras, Hausdorff School of Advanced Studies in Mathematics, Bonn, Germany
hsm.uni-bonn.de/events/hsm-schools/noncomm/description/
- 2022 July 11 - July 22, 2022: MSRI Metric Geometry and Geometric Analysis Graduate Summer School, University of Oxford, Oxford, UK.
maths.ox.ac.uk/groups/topology/metric-geometry-and-geometric-analysis
- 2021 August 16 - 20, 2021: Noncommutative geometry meets topological recursion, University of Münster, *Online*
- 2020 June 28 - July 19, 2020: Groundwork for Operator Algebras Lecture Series, Michigan State University, *Online*
- 2019 December, 2019: K -theory and C^* -algebras, University of Hawai'i at Mānoa
- 2019 May 28 - June 1: Great Plains Operator Theory Symposium, Texas A&M University
- 2018 October 13 - October 14: East Coast Operator Algebras Symposium, Texas Christian University

Awards & Grants

- 2023 University of Hawai'i at Mānoa, Mathematics Department - Summer Research Funding - \$3,500
- 2023 ARCS Foundation - Sarah Ann Martin Award in Mathematics 2023 - \$5,000

Mentorship

- 2021 - Pres. University of Hawai'i at Mānoa
Directing the Summer Qualifying Exam Practice for Algebraic Topology

Teaching

- COURSE INSTRUCTOR
- 2020 Summer: Math 100 - Survey of Mathematics

TEACHING/GRADING ASSISTANT

All done at the University of Hawai'i at Mānoa

Math 321 - Introduction to Proofs	Fall 2022
Math 301 - Introduction to Discrete Mathematics	Spring 2021
Math 307 - Linear Algebra and Differential Equations	Spring 2021
Math 253 - Honors Calculus III	Spring 2021, Spring 2022
Math 252 - Honors Calculus II	Spring 2022
Math 242 - Calculus II	Fall 2020, Fall 2021
Math 215 - Applied Calculus I	Fall 2019
Math 140 - Precalculus	Spring 2020