Axel Kodat

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Department of Mathematics CUNY Graduate Center 365 5th Ave New York, NY 10016

Education

CUNY Graduate Center

PhD Program in Mathematics

Advisor: Enrique Pujals

Swarthmore College

BA with High Honors in Mathematics and Philosophy

2017-present

2017-present

2017-present

Preprints

An average intersection estimate for families of diffeomorphisms 2024 with Michael Shub, arXiv:2403.17349

Talks

| <u>IGIKS</u> | |
|---|----------|
| Dynamical Systems Seminar IMPA, Rio de Janeiro, BR | Feb 2024 |
| From dynamics to complexity, and back again: a conference in celebration of Michael Shub's 80th Birthday IMERL, Universidad de La República, Montevideo, UY | Jan 2024 |
| Complex Analysis & Dynamics Seminar, CUNY Graduate Center • "An average intersection estimate for families of diffeomorphisms" | Dec 2023 |
| Learning Seminar on Ergodic Theory & Dynamical Systems, CUNY GC | |
| "Introduction to the entropy conjecture" | Dec 2023 |
| • "Distortion elements in diffeomorphism groups" | Oct 2022 |
| • "A Tits alterrnative for subgroups of circle homeomorphisms" | Feb 2022 |

Conferences

| Symplectic dynamics in Montevideo Universidad de La República, Montevideo, UY | Feb 2024 |
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| From dynamics to complexity, and back again: a conference in celebration of Michael Shub's 80th Birthday Universidad de La República, Montevideo, UY | Jan-Feb 2024 |
| Workshop in Dynamical Systems and Related Topics Penn State, State College, PA | November 2023 |
| Partial Hyperbolicity Workshop & Summer School Brin Center, University of Maryland, College Park, MD | May-June 2023 |
| Big Mapping Class Groups and Diffeomorphism Groups CIRM, Marseille, FR | October 2022 |
| School on Dynamical Group Theory Université de Bourgogne, Dijon, FR | October 2022 |
| Workshop on Dynamical Systems University of Maryland, College Park, MD | April 2022 |
| Flexibility & Rigidity in Dynamical Systems Stony Brook University, Stony Brook, NY | March 2022 |
| Midwest Dynamical Systems Conference Northwestern University, Chicago, IL | November 2021 |
| <u>Teaching</u> | |
| Brooklyn College Math 1011: Precalculus (College Now) | Summer 2018 |

Delaware County Community College

Math 1401: Elementary Math from an Advanced Standpoint

Math 1201: Calculus I

Math 1206: Calculus II

Math 2201: Calculus III

Math Tutor 2015-2016

Fall 2018, Fall 2019

Spring 2020, Fall 2020

Spring 2021

Summer 2019

Fellowships & Awards

| Research Assistant, NSF Grant #2400008: A description of surface dynamics | 2024-present |
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| Special Projects Fellow, CUNY Academy for the Humanities & Sciences | 2023-present |
| CUNY Initiative for the Theoretical Sciences, Simons Fellowship | 2022-2023 |
| Excellence in Teaching by a Doctoral Candidate Award (GC Math) | 2021 |
| Research Assistant, NSF Grant #1956022: Dynamics of surface maps | 2020-2022 |
| Math/Graduate Center Fellowship, CUNY Graduate Center | 2017-2022 |
| Kitüntetéssel (Honors), Budapest Semesters in Mathematics | 2013 |