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Curriculum Vitae

Haim Grebnev

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Employment:

- Gibbs Assistant Professor in Mathematics Department at Yale University (June 2024 – present)
- TA/grader at University of Washington (September 2018 – June 2024)

Education:

- Ph.D. in Mathematics
    - University of Washington, Department of Mathematics (2021 – 2024). Advised by Gunther Uhlmann. Thesis: *The Non-Abelian X-ray Transform on Asymptotically Hyperbolic Spaces*.
- Master of Science in Mathematics
    - University of Washington, Department of Mathematics (2018 – 2021)
- Bachelor of Science (Mathematics - Comprehensive), with Honors in Mathematics
    - University of Washington (2015 – 2018). Thesis under John M. Lee: *The Calculus of Variations and Variational Differential Geometry*

Papers:

- Haim Grebnev. The Non-Abelian X-Ray Transform on Asymptotically Hyperbolic Spaces. Preprint, 2025. View at: https://arxiv.org/abs/2312.09408

Awards:

- Honors Calculus Award (2nd year), University of Washington, 2017
- Honors Calculus Award (1st year), University of Washington, 2016

Research Travels:

- Applied Inverse Problem (AIP) Conference, Mini symposium "Young researchers in geometric inverse problems and PDEs," Rio de Janeiro, Brazil (upcoming: July 2028).
- AMS Sectional Meeting, Special Session on "Inverse Problems: Theory and Applications," University of Kansas (March 2025)
- Spectral and Scattering Seminar, Purdue University (November 2024)

- 2024 SIAM New York-New Jersey-Pennsylvania Section Conference, Rochester Institute of Technology (November 2024)
- Summer School: *Geometric Inverse Problems and Inverse Problems for Elliptic Equations*, UC Santa Cruz (August 2024),
- CBMS Conference: *Inverse Problems and Nonlinearity*, Clemson University (June 2024)
- Research exchange visit to Stanford University (November 2023)
- BIRS Workshop *Inverse Problems and Nonlinearity*, Banff, Canada (July 2023)
- Math + X Symposium on Matter, Costa Rica (November 2022)
- "Inverse Problems in Analysis and Geometry" conference, University of Helsinki (August 2022)
- Participant in MSRI summer program "Integral Equations and Applications," MSRI Berkley CA (June 2022)
- Research visit to the University of Cambridge, invited by Gabriel Paternain (May 2022)

Grants:

- PIMS grant to support "UW Early Career Inverse Problems and PDE/Microlocal Analysis Seminar" held at the University of Washington, 2022 – 2023 academic year (CAD $2500)
- PIMS grant to support "Early Career Inverse Problems/DG/PDE Seminar" held at the University of Washington, 2023 – 2024 academic year (CAD $3000)

Seminars (Co)Organized:

- Co-organized "UW Early Career Inverse Problems and PDE/Microlocal Analysis Seminar," held at the University of Washington, 2022 – 2023 academic year (jointly with Hadrian Quan)
    - Invited both internal and external speakers – supported by PIMS grant and the department.
- Co-organized "Early Career Inverse Problems/DG/PDE Seminar," held at the University of Washington, 2023 – 2024 academic year (jointly with Hadrian Quan)
    - Invited both internal and external speakers – supported by PIMS grant and the department.

Outreach:

- Graduate Mentor of the WXML project "Locating the Walsh inequalities in the SNIEP," University of Washington, Spring 2019

    - Mentored a small undergraduate team in a research project under the guidance of Pietro Papparella.

- Graduate Mentor of a WDRP project using the book *Calculus of Variations* by I.M. Gelfand and S.V. Fomin, University of Washington, Autumn 2019
    - Led a one-on-one reading course with a talented undergraduate.
- Helped set up the conference "Harmonic Analysis and Waves: A Conference Celebrating Hart Smith's 60th Birthday" held at the University of Washington, August 2022:

  https://www.haimgrebnev.com/HartSmithConf_I
- Gave a speech at "Admitted Student Preview Day" at the University of Washington to an audience of newly admitted undergraduates and their parents, April 2019.
    - I talked about my experiences as an undergraduate at the University of Washington and the variety of educational and research opportunities that the university offers.

Teaching:

Yale University:

- (Current) Math 302: Vector Analysis and Integration on Manifolds
- (Current) Math 225: Linear Algebra (proof based)
- Math 255: Analysis 1

University of Washington:

- TA for Math 134: Accelerated Honors Calculus
- TA/Grader for Math 534: Graduate Complex Analysis
- TA/Grader for Math 428: Undergraduate Complex Analysis
- TA for Math 208: Matrix Algebra with Applications
- TA for Math 207: Introduction to Differential Equations
- TA for Math 124/125/126: Calculus with Analytic Geometry I/II/III
- TA for Math 112: Application of Calculus to Business and Economics

Other Skills

- Extensive experience programming in the language C#.
- I natively command both English and Russian.
    - Learning Hebrew.

- I’m willing to learn any other language if needed.

Website:

https://www.haimgrebnev.com/

Includes notes, preprint, research interests, etc.