Changying Ding

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Academic Employment

Hedrick Assistant Adjunct Professor, University of California, Los Angeles, 2023 - current.

Mentor: Sorin Popa and Dimitri Shlyakhtenko.

Education

Ph.D. in Mathematics, Vanderbilt University, USA, May 2023.

Advisor: Jesse Peterson.

B.S. in Mathematics, Central South University, China, May 2018.

Research interests

Operator Algebras (von Neumann and C*-algebras), Ergodic Theory (measure and orbit equivalences) and Group Theory (analytic and geometric group theories)

Publications/Preprints

8. C. Ding, H, Tan, *Structural and non-isomorphism results for q-Araki-Woods factors*, arXiv: 2509.21636.

7. C. Ding, D. Drimbe, *Relative solidity for biexact groups in measure equivalence*, arXiv: 2503.24167.

6. C. Ding, *A unique Cartan subalgebra result for Bernoulli actions of weakly amenable groups*, arXiv:2404.08182,
   Journal of Functional Analysis, 228 (2025), no. 10, 110852.

5. C. Ding, J. Peterson, *Biexact von Neumann algebras*, arXiv:2309.10161.

4. C. Ding, *First ℓ^2-Betti numbers and proper proximality*, arXiv:2211.05951,
   Advances in Mathematics, 438 (2024), 109467.

3. C. Ding, S. Kunnawalkam Elayavalli, *On the structure of relatively biexact group von Neumann algebras*,
   arXiv:2211.05298,
   Communications in Mathematical Physics, 405 (2024), No. 104.

2. C. Ding, S. Kunnawalkam Elayavalli, J. Peterson, *Properly proximal von Neumann algebras*, arXiv:2204.00517,
   Duke Mathematical Journal, 172 (2023), no. 15, 2821 - 2894.

1. C. Ding, S. Kunnawalkam Elayavalli, *Proper proximality for various families of groups*, arXiv:2107.02917,
   Groups, Geometry, and Dynamics, 18 (2024), no. 3, 921-938.

Grant

AMS-Simons Travel Grant, 2024-2026

Talks

Colloquium, University of Iowa, November 2025.

East Coast Operator Algebras Symposium, University of Nebraska-Lincoln, October 2025.

Subfactor Seminar, Vanderbilt University, April, 2025.

Functional Analysis Seminar, University of California, San Diego, April 2025.

Operator Theory Seminar, University of Iowa, November 2024.

Group Operator Algebras: Classification, Structure and Rigidity, BIRS, September, 2024.

Noncommutative Geometry in NYC, May, 2024.

Subfactor Seminar, Vanderbilt University, April, 2024.

Functional Analysis Seminar, Oxford University, March, 2024.

Functional Analysis Seminar, University of California, San Diego, December 2023.

Analysis Seminar, Houston University, November 2023.

Probabilistic Operator Algebra Seminar, University of California, Berkeley, October 2023.

Functional Analysis Seminar, University of California, Los Angeles, October 2023.

Workshop on Operator Algebras and Applications: Groups and Group Actions, Fields Institute, October 2023.

Seminar in Operator Theory and Operator Algebras, University of Virginia, September, 2023.

NCGOA Spring Institute 2023, Vanderbilt University, May 2023.

Workshop on Operator Algebras and Quantum Information, Delaware University, May 2023.

Workshop III in Von Neumann Algebras and Geometric Group Theory, University of Iowa, April 2023.

Operator Algebras Seminar, Purdue University, March 2023.

Workshop on Von Neumann Algebras and Geometric Group Theory, University of California, San Diego, February 2023.

Topology & Group Theory Seminar, Vanderbilt University, February 2023.

Subfactor Seminar, Vanderbilt University, January 2023.

AMS special session on advances of operator algebras, Joint Mathematics Meetings 2023, January 2023.

Subfactor Seminar, Vanderbilt University, November 2022.

Functional Analysis Seminar, University of California, Los Angeles, November 2022.

East Coast Operator Algebras Symposium, Michigan State University, October 2022.

Operator Theory Seminar, University of Iowa, October 2022.

Subfactor Seminar, Vanderbilt University, September 2022.

Great Plains Operator Theory Symposium, Washington University in St. Louis, May 2022.

Functional Analysis Seminar, University of California, San Diego, May 2022.

Subfactor Seminar, Vanderbilt University, November 2021.

Services

AMS Special Session on Advances in Operator Algebras, Joint Mathematics Meetings, 2026.

AMS Special Session on Advances in Operator Algebras, Joint Mathematics Meetings, 2025.

Functional Analysis Seminar, University of California, Los Angeles, starting Fall 2023.

Teaching

Instructor	Fall 2024, Winter 2024
MATH 31B Calculus	University of California, Los Angeles
Instructor	Fall 2023, Winter 2024, Spring 2024, Winter 2025
MATH 131A Analysis	University of California, Los Angeles
Instructor	Fall 2024, Spring 2025
MATH 131B Analysis II	University of California, Los Angeles