

CHANGYING DING

changying.ding@vanderbilt.edu \diamond cding.me

EDUCATION

Vanderbilt University

- Ph.D. in Mathematics Aug 2018 - May 2023 (expected)
- Advisor: Jesse Peterson

Central South University

- B.S. in Mathematics Sep 2014 - May 2018

PUBLICATIONS/PREPRINTS

1. C. Ding: *First ℓ^2 -Betti numbers and proper proximality*, arXiv:2211.05951, preprint 2022.
2. C. Ding, S. Kunnawalkam Elayavalli: *An upgrading theorem for properly proximal von Neumann algebras*, arXiv:2211.05298, preprint 2022.
3. C. Ding, S. Kunnawalkam Elayavalli, J. Peterson: *Properly proximal von Neumann algebras*, arXiv:2204.00517, preprint 2022, to appear in **Duke Mathematical Journal**.
4. C. Ding, S. Kunnawalkam Elayavalli: *Proper proximality for various families of groups*, arXiv:2107.02917, preprint 2021.

RESEARCH INTERESTS

Operator algebras, ergodic theory, geometric group theory, and operator space theory.

TALKS

1. “First ℓ^2 -Betti numbers and proper proximality”, November 2022, Subfactor Seminar, Vanderbilt University.
2. “First ℓ^2 -Betti numbers and proper proximality”, November 2022, Functional Analysis Seminar, UCLA.
3. “Properly proximal von Neumann algebras”, October 2022, East Coast Operator Algebras Symposium, Michigan State University.
4. “Properly proximal von Neumann algebras”, October 2022, Dalian University of Technology.
5. “Properly proximal von Neumann algebras”, October 2022, Operator Theory Seminar, University of Iowa.
6. “A topology on bimodules and properly proximal von Neumann algebras”, September 2022, Subfactor Seminar, Vanderbilt University.
7. “Properly proximal von Neumann algebras”, May 2022, Great Plains Operator Theory Symposium, WUSTL.
8. “Properly proximal von Neumann algebras”, May 2022, Functional Analysis Seminar, UCSD.
9. “Proper proximality for groups acting on trees”, November 2021, Subfactor Seminar, Vanderbilt University.

TEACHING

- **Instructor** Fall 2022
MATH 1005 Pre-calculus Vanderbilt University

- **Teaching assistant**
MATH 2400 Differential Equations with Linear Algebra
Spring 2022
Vanderbilt University
- **Instructor**
MATH 1005 Pre-calculus
Fall 2021
Vanderbilt University
- **Teaching assistant**
MATH 2400 Differential Equations with Linear Algebra
Spring 2021
Vanderbilt University
- **Teaching assistant**
MATH 1300 Accelerated Single-Variable Calculus I
Fall 2020
Vanderbilt University
- **Teaching assistant**
MATH 2810 Probability and Statistics for Engineering
Spring 2020
Vanderbilt University
- **Teaching assistant**
MATH 2810 Probability and Statistics for Engineering
Fall 2019
Vanderbilt University