

Cory Colbert, Ph.D.

FULL CURRICULUM VITAE

Washington & Lee University
Chavis Hall, Room 102
Lexington, Va. 24450
+1 (540) 458 8655
ccolbert@wlu.edu

Academic Employment

- 2024-current **Associate Professor of Mathematics**, Washington & Lee University, Lexington, VA
- 2018-2024 **Assistant Professor of Mathematics**, Washington & Lee University, Lexington, VA
- 2016-2018 **Gaius C. Bolin Fellow in Mathematics**, Williams College, Williamstown, MA
- 2012-2016 **Teaching Assistant**, The University of Texas at Austin, Austin, TX

Education

- 2017 **Ph.D. - Mathematics**, The University of Texas at Austin, Austin, TX
- 2013 **M.A. - Mathematics**, The University of Texas at Austin, Austin, TX
- 2011 **B.S. - Mathematics**, Virginia Commonwealth University, Richmond, VA

Summer Academic Employment

- 2014-2021 **Bridge to Enter Advanced Mathematics**
BEAM is a residential summer mathematics program designed for 7th graders from under-served middle schools in New York City
- 2022 **PRiME REU Research Director**
PRiME, short for "Pomona Research in Mathematics Experience," is an NSF-funded summer mathematics research experience that focuses on community and mentorship through coursework, research, panels, talks, field trips, and other activities. I directed a research group on order theory.

Doctoral Thesis and Research Interests

- Title: Cardinality Restrictions on Noetherian Spectra
- Supervisor: Raymond Heitmann
- Award: Frank Gerth III Award for Dissertation Excellence
Department-wide award for thesis excellence.
- Research interests: Commutative algebra; Noetherian geometry and spectra; order theory and set theory.

Publications

- 2023 (with S. Loepp) *Every finite poset is isomorphic to the saturated subset of the spectrum of some Noetherian UFD*. To appear in *Journal of Algebra*
- 2023 *A Structural Invariant on Certain Two-Dimensional Noetherian Partially Ordered Sets*
Rocky Mountain Journal of Mathematics, Volume 53, No. 3, 711-724, DOI: 10.1216/rmj.2023.53.711
- 2022 (with S. Loepp) *Gluing minimal prime ideals in local rings*, Communications in Algebra, 51:1, 239-247, DOI: 10.1080/00927872.2022.2096226

- 2021 *Enlarging localized polynomial rings while preserving their prime ideal structure*, Journal of Algebra, Volume 575, 2021, Pages 14-30
- 2013 (with E. Burger, D. Clyde, G. Shin, and Z. Wang) *Canonical Diophantine representations of natural numbers with respect to quadratic "bases."* J. Number Theory 133 (2013) no. 4, 1372-1388
- 2012 (with E. Burger, D. Clyde, G. Shin, and Z. Wang) *A generalization of a theorem of Lekkerkerker to Ostrowski's decomposition of natural numbers.* Acta Arith. 153 (2012), no. 3, 217-249

Submissions & Works in Progress

- 2022 (with A. Lee) *Symplectic embeddings of ellipsoids into polydisks.* In progress.
- 2022 (with R. Garcia, et. al) *Automorphisms of certain infinite orders.* In progress.

Teaching Experience

Washington & Lee University

Winter 2023	Linear Algebra	<i>Instructor</i>
Winter 2023	Bridges to Advanced Mathematics	<i>Instructor</i>
Fall 2022	Calculus I	<i>Instructor</i>
Fall 2022	Calculus II	<i>Instructor</i>
Winter 2022	Bridges to Advanced Mathematics	<i>Instructor</i>
Winter 2022	Topics in algebra	<i>Instructor</i>
Fall 2021	Bridges to Advanced Mathematics	<i>Instructor</i>
Fall 2021	Linear Algebra	<i>Instructor</i>
Winter 2021	Bridges to Advanced Mathematics	<i>Instructor</i>
Winter 2021	Real Analysis	<i>Instructor</i>
Winter 2020	Bridges to Advanced Mathematics	<i>Instructor</i>
Fall 2019	Abstract Algebra	<i>Instructor</i>
Fall 2019	Calculus II	<i>Instructor</i>
Winter 2019	Linear Algebra	<i>Instructor</i>
Winter 2019	Calculus II	<i>Instructor</i>
Fall 2018	Calculus II	<i>Instructor</i>
Fall 2018	Calculus I	<i>Instructor</i>

Williams College

Fall 2017	Calculus I	<i>Instructor</i>
Spring 2017	Commutative Algebra	<i>Instructor</i>

The University of Texas at Austin

Spring 2016	Plan II Honors Introduction to Mathematics	<i>Teaching Assistant</i>
Fall 2014	Vector Calculus	<i>Teaching Assistant</i>
Spring 2014	Calculus I	<i>Teaching Assistant</i>
Fall 2013	From Numbers to Chaos	<i>Teaching Assistant</i>
Summer 2013	Introduction to Mathematics	<i>Teaching Assistant</i>
Spring 2013	Introduction to Mathematics	<i>Teaching Assistant</i>
Fall 2015	Real Analysis I	<i>Grader</i>
Summer 2014	Introduction to Number Theory	<i>Grader</i>

Summer 2014 Linear Algebra
Summer 2014 Applied Linear Algebra

Grader
Grader

Grants & Funding

Summer 2023 Lenfest Scholarship Grant
Summer 2022 Lenfest Scholarship Grant
Summer 2021 Lenfest Scholarship Grant
Summer 2020 Lenfest Scholarship Grant
Summer 2019 Lenfest Scholarship Grant

Honors, Awards, and Fellowships

The University of Texas at Austin

2017 Frank Gerth III Dissertation Award
2015 Summer Mathematics Department Fellowship
2011 Diversity Recruitment Fellowship
Competitive fellowship awarded to select applicants.
2011 Departmental Fellowship

Virginia Commonwealth University

2011 Pure Mathematics Award

Invited Talks, Presentations, and Panels

May 2022 *Structural invariants for certain Noetherian orders*
NAM FCRTE

October 2021 *Undergraduate Colloquium Talk*
Carleton College

May 2021 *Structural Invariants on Noetherian Partial Orders*
FCRTE (Virtual)

March 2021 *Structural Invariants of Noetherian Partial Orders*
Virginia Tech (Virtual)

January 2020 *Growth Through Outreach: How I Became a Better Mathematician and Teacher Through Outreach Programs*
JMM 2020

July 2019 *Enlarging Localized Polynomial Rings*
Pomona College

July 2019 *Sequences, Σ ums, Sounds, and Sloanes*
Pi Mu Epsilon Honors Induction Ceremony
University of California, Riverside

April 2019 *Enlarging Localized Polynomial Rings*
NAM Faculty Conference in Research and Teaching Excellence
Texas Southern University

April 2018 *Sequences, Σ ums, Sounds, and Sloanes*
Pi Mu Epsilon Honors Induction Ceremony
Virginia Commonwealth University

February 2018 *Results concerning the spectrum of Noetherian rings*
The University of Missouri

- January 2018 *Noetherian Spectra*
AMS Special Session on SMALL Undergraduate Research
- January 2018 *Results concerning the spectrum of Noetherian rings*
Math Alliance AMS Special Session
- January 2018 *Enlarging Noetherian Rings While Preserving Their Spectrum*
Granville-Brown-Haynes Session
National Association of Mathematicians
- November 2017 *The Doctoral Experience*
Panel Moderator. Math Alliance Conference, St. Louis, MO.
- September 2017 *Partially Ordered Sets and Noetherian Rings*
Union College, Schenectady, NY.
- April 2017 *Mentoring Panel*
Underrepresented Students in Topology and Algebra Research Symposium
Amherst College, Amherst, MA.
- March 2017 *Semi-Local Two-Dimensional Noetherian Spectra*
Commutative Algebra Seminar
Purdue, West Lafayette, IN.
- April 2016 *Cardinality Restrictions on Semi-Local Spectra*
Underrepresented Students in Topology and Algebra Research Symposium
Sam Houston State University, Huntsville, TX.
- April 2015 *Prime intersections, Noetherian rings, and N -posets: A survey*
Underrepresented Students in Topology and Algebra Research Symposium
Florida Gulf Coast University, Ft. Myers, FL.
- January 2014 *Integer Sequences and Algebraic Identities*
Washington and Lee University, Lexington, VA.

Service to Mathematics

National Association of Mathematicians

- Winter 2020- Treasurer & Member of the Board of Directors
- Spring MAD Pages Editorial Board
- 2018-Spring Updating and verifying Scott Williams' database on doctoral recipients of the African diaspora
- 2019

Williams College

- Spring 2018 Second Reader for Undergraduate Thesis
Student: Weitao Zhang
- Spring 2018 Undergraduate Research Supervisor
Student: Eli Cytrnbaum
- Fall 2017 Calculus Reform Committee
- Fall 2017 Invited Guest, AWM Lunch
- Fall 2017 Second Reader for Undergraduate Thesis
Student: Sarah Fleming
- Fall 2016 Co-organizer for *MathBlast!*
MathBlast! is a day-long mathematics workshop for 10th graders held at and organized by Williams College.

The University of Texas at Austin

- 2015 Ombudsperson and Prerequisites Officer for Department of Mathematics
Duties: Hear grievances involving mathematics courses and verify prerequisites.
- 2015 Coordinator for Mathematics Club
- 2014-2015 Junior Number Theory Seminar Organizer and Chair
- 2013-2014 Directed Reading Program (DRP) Mentor
Student: Valentino Rodriguez
DRP is a program for undergraduates to explore upper-level mathematics with graduate students

Professional Memberships

- 2020-current QSIDE
- 2019-current Project NExT
- 2019-current Mathematical Association of America
- 2018-current National Association of Mathematicians
- 2014-current National Alliance for Doctoral Studies
Mentor: Susan Loepp
- 2011-current American Mathematical Society

References

Raymond Heitmann

Professor of Mathematics at The University of Texas at Austin
heitmann@math.utexas.edu

Edray Goins

Professor of Mathematics at Pomona College
edray.goins@pomona.edu

Susan Loepp

Chair and Professor of Mathematics at Williams College
sloep@williams.edu

Stephen McAdam

Professor of Mathematics (*retired*) at The University of Texas at Austin
mcadam@math.utexas.edu

Thomas Chen

Chair and Associate Professor of Mathematics at The University of Texas at Austin
chair@math.utexas.edu or tchen@math.utexas.edu

Reva Kasman

Associate Professor of Mathematics at Salem State University
reva.kasman@salemstate.edu