Dr. Scott Varagona

Curriculum Vitae

Department of Biology, Chemistry, Mathematics & Computer Science
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Education

- **Ph.D.**, Mathematics; Auburn University, May 2012
  - Dissertation: *Simple Techniques for Detecting Decomposability or Indecomposability of Generalized Inverse Limits*
  - Advisor: Michel Smith

- **Master of Science**, Mathematics; Auburn University, December 2008
  - Thesis: *Inverse Limit Spaces*
  - Advisor: Michel Smith

- **Bachelor of Science**, Mathematics; Auburn University, December 2005

- **Bachelor of Arts**, Philosophy; Auburn University, December 2005

Teaching Experience

- University of Montevallo; Department of Biology, Chemistry, Mathematics & Computer Science
  - **Professor**, 2023-present
  - **Associate Professor**, 2018-2023
  - **Assistant Professor**, 2012-2018

  - Courses Taught at the University of Montevallo:
    - Intermediate Algebra
    - Pre-Calculus with Algebra
    - Finite Mathematics
    - The Nature of Mathematics
    - Honors Nature of Mathematics
    - Calculus I
    - Calculus II
    - Survey of Mathematics
    - Introduction to Discrete Mathematics
    - Sequences and Series
    - Calculus III
    - Mathematics of Chess
    - Foundations of Mathematics
    - Graph Theory

        - Linear Algebra
        - Topology
        - Directed Reading
        - Senior Seminar
        - Mathematics Colloquium

- Auburn University; Department of Mathematics & Statistics
    - **Graduate Teaching Assistant**, 2006-2012

    - Courses Taught at Auburn University:
        - Calculus I
        - Calculus II
        - Calculus III
        - Business Calculus I

Books Written for UM Courses

- *Calculus III with Dr. V* (2024), e-book for MATH 272.
- *Mathematics for Montevallo* (first edition 2018, second edition 2026), e-book for MATH 154/155.
- *The Montevallo Pre-Cal Workbook* (2017), e-book for MATH 144.

Self-Published Chess Book

- *Kings of My Home State: The Legacies of Alabama's Greatest 20th Century Chess Champions* (2023)

Peer-Reviewed Journal Articles

- "Inverse Limits with Smith Functions," E-published by *Topology Proceedings* on October 4, 2022; also in *Topology Proceedings* Vol. 62 (2023), p. 23-43.
- "Mahavier Products, Idempotent Relations, and Condition Γ" (co-authored with Steven Clontz), *Topology Proceedings*, Vol. 54 (2019), pp. 259-269.
- "Destruction of Metrizability in Generalized Inverse Limits" (co-authored with Steven Clontz), *Topology Proceedings*, Vol. 48 (2016), pp. 289-297.
- "Generalized Inverse Limits with N-type Bonding Functions" (co-authored with Michel Smith), *Houston Journal of Mathematics*, Vol. 42, No. 2 (2016), pp. 637-657.
- "Homeomorphisms between Inverse Limits with N-Shaped Set-Valued Functions," *Topology Proceedings*, Vol. 44 (2014), pp. 233-248.
- "Inverse Limits with Upper Semi-Continuous Bonding Functions and Indecomposability," *Houston Journal of Mathematics*, Vol. 37, No. 3 (2011), pp. 1017-1034.

Selected Research Presentations

- "Generalized Inverse Limits on Circles," 59th Spring Topology and Dynamics Conference (University of Alabama at Birmingham), 2026.

- "Inverse Limits with Smith Functions and Indecomposability," 39th Summer Topology and Its Applications Conference (University of South Alabama), 2025.
- "Inverse Limits with Smith Functions," 54th Spring Topology and Dynamical Systems Conference (Hosted online by Murray State University), 2021.
- "Metrizability of Mahavier Products with V-Relations," Spring Topology and Dynamics Conference (University of Alabama at Birmingham), 2019.
- "Generalized Inverse Limits that Banish their Graphs," Spring Topology and Dynamics Conference (Auburn University), 2018.
- "Destruction of Metrizability in Generalized Inverse Limits," 50th Spring Topology and Dynamics Conference (Baylor University), 2016.
- "Generalized Inverse Limits Indexed by Ordinals," Spring Topology and Dynamics Conference (Bowling Green State University), 2015.
- "Generalized Inverse Limits and Indecomposable Continua: N-type Bonding Functions and Beyond," Semi-Plenary talk; Spring Topology and Dynamics Conference (University of Richmond), 2014.
- "Inverse Limits with 'N-shaped' Set-Valued Functions," Spring Topology and Dynamics Conference (Central Connecticut State University), 2013.
- "Amalgamating Factor Spaces of Generalized Inverse Limits," Joint Mathematics Meetings (Boston), 2012.
- "Inverse Limits with u.s.c. Bonding Functions: a Do-It-Yourself Guide for Building Indecomposable Continua," Spring Topology and Dynamics Conference (University of Texas at Tyler), 2011.
- "Inverse Limits with u.s.c. Bonding Functions and Indecomposability," Spring Topology and Dynamics Conference (Mississippi State University), 2010.
- "Inverse Limits with u.s.c. Bonding Functions and Indecomposable Continua," Spring Topology and Dynamics Conference (University of Florida), 2009.

Undergraduate Research Projects Directed

- Ordinal Numbers and Set Theory (2024)
- The Cantor Set (2017)

Academic Awards & Accomplishments

- Awarded Promotion to Full Professor at the University of Montevallo, 2023
- Awarded Tenure & Promotion to Associate Professor at the University of Montevallo, 2018
- Recipient of the annual College of Arts and Sciences College Teaching Award at UM, 2018
- Recipient of a Summer Stipend for Pre-Tenured Faculty for mathematics research at UM, 2016
- Winner of the Dean's Master Research Award in Auburn University's College of Science and Mathematics, 2008-2009

Committees, Leadership, Outreach & Other Activities

- UCSC Co-Chair, 2019-2023
- UCSC Representative from the College of Arts and Sciences, 2014-2023

- QEP Selection Committee Member & Quantitative Reasoning Team Leader, 2019
- Institutional Effectiveness Committee Member, 2019-2023
- Transforming Academic Advising Committee Member, 2018-19
- First Year Experience Task Force Member, 2017-18
- McNair Scholars Program Advisory Board Member, 2013-2021
- Academic Integrity Committee Member, 2026-present
- Chess Club of Montevallo (CCM) Faculty Advisor, 2012-present
- KME Alabama Gamma Chapter Faculty Advisor, 2017-2021
- Editor of the UM Mathematics Program's Alumni Newsletter, *Montevallo Mathematics*, 2014-2017
- Volunteer at Parnell Memorial Library Chess Club (for local scholastic players), 2014-2018
- University of Montevallo Life Raft Debate participant, 2013-2019; winner in 2013, 2015 & 2017
- Host of the Alabama State Scholastic Chess Championships at UM in 2014; host of the Alabama Senior Chess Championships at UM in 2019, 2022-2026
- Host and co-organizer of the annual Falcon Chess Invitational chess tournament, 2015-2019, 2022-2026
- Referee of various papers for the journal *Topology Proceedings*, 2011-present

Chess Achievements & Honors

- National Master title achieved in 2012 & Original Life Master title achieved in 2019
- Alabama State Chess Champion in 2002, 2005, 2007, 2008, 2013, 2015, 2017-2020, 2022, & 2026
- Alabama Chess Hall of Fame inductee, Class of 2022
- Editor of the Alabama Chess Federation's magazine, *Alabama Chess Antics*, 2009-2012 and 2015-present
- Author of numerous articles in *Alabama Chess Antics*, 2004-2026
- Chair of the Alabama Chess Hall of Fame Committee, 2021-present
- Co-Winner of Chess Journalists of America's 2023 Best Self-Published Book Award (for *Kings of My Home State*)
- Chess Journalists of America Cramer Award Winner: Best State Championship Report (2020-23) & Best Personal Narrative (2024-26)

References

- Houston Byrd – byrdh@montevallo.edu (BCMC, University of Montevallo)
- Benton Tyler – TylerBW@montevallo.edu (BCMC, University of Montevallo)