Curriculum Vitae – Cody B. Stockdale

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Professional Experience:

Assistant Professor - Clemson University, 2022 - Present.

Postdoctoral Fellow - Clemson University, 2020 – 2022.

Education:

Washington University in St. Louis, St. Louis, Missouri.

Ph.D. in Mathematics, 2020.

Advisor: Brett D. Wick.

A.M. in Mathematics, 2017.

Bucknell University, Lewisburg, Pennsylvania.

B.S. in Mathematics (with honors), 2015.

Research:

Research Interests:

Harmonic Analysis, Operator Theory, Complex Analysis, Partial Differential Equations.

Grants Awarded:

1. National Science Foundation – DMS # 2247845 "Conference: Southeastern Analysis Meeting 39," 03/01/2023 - 02/29/2024, \$35,695.

Publications (accepted or published):

- 1. (with N. A. Wagner) Weighted theory of Toeplitz operators on the Bergman space, Math. Z. **305** (2023), no. 1, Paper No. 10, 29 pp.
- 2. (with M. Mitkovski, N. A. Wagner, and B. D. Wick) Riesz-Kolmogorov type compactness criteria in function spaces with applications, Complex Anal. Oper. Theory 17 (2023), no. 3, Paper No. 40, 31 pp.
- 3. A weighted endpoint weak-type estimate for multilinear Calderón-Zygmund operators, J. Geom. Anal. **33** (2023), no. 2, Paper No. 68. 22 pp.
- 4. (with N. A. Wagner) Weighted endpoint bounds for the Bergman and Cauchy-Szegő projections on domains with near minimal smoothness, Indiana Univ. Math. J. 71 (2022), no. 5, 2099–2125.
- 5. (with P. Villarroya and B. D. Wick) Sparse domination results for compactness on weighted spaces, Collect. Math. **73** (2022), no. 3, 535–563.

- 6. (with D. Spector) On the dimensional weak-type (1,1) bound for Riesz transforms, Commun. Contemp. Math. 23 (2021), no. 7, 2050072, 19 pp.
- 7. A different approach to endpoint weak-type estimates for Calderón-Zygmund operators, J. Math. Anal. Appl. 487 (2020), no. 2, 124016, 13 pp.
- 8. (with L. Grafakos) A limited-range Calderón-Zygmund theorem, Bull. Hellenic Math. Soc. **63** (2019), 54–63.
- 9. (with B. D. Wick) An endpoint weak-type estimate for multilinear Calderón-Zygmund operators, J. Fourier Anal. Appl. **25** (2019), no. 5, 2635–2652.
- 10. (with D. Condon, S. Coskey, and L. Serafin) On Generalizations of Separating and Splitting Families, Electon. J. Combin. 23 (2016), no. 3 #P3.36.

Publications (submitted or preprints):

- 1. (with M. Mitkovski) On the T1 theorem for compactness of Calderón-Zygmund operators, Arxiv e-prints: 2309.15819 (2023). [Submitted]
- 2. (with Z. Nieraeth and B. Sweeting) Weighted weak-type bounds for multilinear singular integrals, Arxiv e-prints: 2401.15725 (2024). [Submitted]
- 3. (with D. Cruz-Uribe) To A_{∞} and beyond. [In Preparation]
- 4. (with C. Waters) Compactness criteria for localized operators with applications to pseudodifferential operators. [In Preparation]
- 5. (with A. Fragkos and B. Sweeting) Weighted weak-type boundedness and compactness in Calderón-Zygmund theory. [In Preparation]
- 6. (with M. Vempati) Compactness of singular integrals in spaces of homogeneous type. [In Preparation]

Students Advised:

Ph.D. Students:

1. Tyler Catoe - Clemson University, Fall 2023 - Present.

Undergraduate Students:

1. Cody Waters - Clemson University, Fall 2023 – Present.

Ph.D. Committee Service:

- 1. Trevor Camper Clemson University, 2024 (Anticipated).
- 2. Dongwei Chen Clemson University, 2024 (Anticipated).
- 3. Travis Alvarez Clemson University, 2023.
- 4. Scott Scruggs Clemson University, 2023.

Research Mentoring:

- 1. Polymath Jr. Undergraduate Research Mentor, Summer 2022.
- 2. Polymath Jr. Undergraduate Research Mentor, Summer 2020.

Referee and Review Service:

Referee for: Adv. Nonlinear Anal., Anal. Math., Bull. London Math. Soc., J. Fourier Anal. Appl., J. Geom. Anal., J. Inequalities Appl., J. Math. Sci., Math. Inequal. Appl., New York J. Math., Oper. Matrices, Potential Anal., Proc. Amer. Math. Soc.

Reviewer for: Math Reviews (14), SpringerBriefs in Mathematics.

Awards and Honors:

- National Science Foundation Graduate Research Fellowship Program (Honorable Mention), 2017.
- David B. Emmes Endowed Scholarship Washington University in St. Louis, Fall 2016
 - Spring 2019.
- 3. Pi Mu Epsilon Society Prize Bucknell University, May 2015.

Talks, Conferences, and Workshops:

Colloquium Talks:

- 1. Clemson University School of Mathematical and Statistical Sciences Colloquium, Spring 2022.
- 2. Lafayette College Mathematics Department Colloquium, Spring 2021.

Seminar Talks:

- 1. Lousiana State University Harmonic Analysis Seminar, Spring 2024.
- 2. University of Cincinnati Analysis Seminar, Spring 2024 (2 talks).
- 3. Brown University Analysis Seminar, Fall 2023.
- 4. National Taiwan Normal University Analysis Seminar, Fall 2023.
- 5. University of Calgary Analysis Seminar, Spring 2023.
- 6. Concordia University Analysis Seminar, Spring 2023.
- 7. Charles University International Prague Seminar on Function Spaces, Spring 2023.
- 8. Ghent University Ghent Methusalem Junior Seminar, Spring 2022.
- 9. Louisiana State University Harmonic Analysis Seminar, Fall 2021 (2 talks).
- 10. Clemson University Analysis Seminar, Fall 2020.
- 11. Okinawa Institute of Science and Technology Nonlinear Analysis Unit Seminar, Fall 2020.
- 12. Georgia Institute of Technology Analysis Seminar, Fall 2020.
- 13. Okinawa Institute of Science and Technology Nonlinear Analysis Unit Seminar, Spring 2020.
- 14. 2TART Online Seminar Series, Fall 2020.
- 15. University of Arkansas Analysis Seminar, Spring 2020.
- 16. Washington University in St. Louis Analysis Seminar, Spring 2020.
- 17. Texas A&M University Mathematical Physics and Harmonic Analysis Seminar, Fall 2019.
- 18. Washington University in St. Louis Analysis Seminar, Spring 2019.
- 19. University of Missouri Analysis Seminar, Spring 2019.
- 20. Washington University in St. Louis Analysis Seminar, Spring 2018.

- 21. Washington University in St. Louis Graduate Student Seminar, Spring 2019, Fall 2018, Fall 2017, Fall 2016, and Spring 2016.
- 22. Bucknell University Algebra Etc. Seminar, Fall 2014.

Conference Talks:

Invited talks:

- Conference on Harmonic Analysis, Louisiana State University, Baton Rouge, Louisiana, Fall 2024.
- 2. European Congress of Mathematics Mini-symposium on Function Spaces and Related Topics, Seville, Spain, Summer 2024.
- 3. American Mathematical Society Spring Central Sectional Meeting Session on Recent Advances in Harmonic Analysis, University of Wisconsin Milwaukee, Spring 2024.
- 4. American Mathematical Society Spring Southeastern Sectional Meeting Session on Geometric Measure Theory and Partial Differential Equations, Florida State University, Spring 2024.
- 5. Canadian Mathematical Society Winter Meeting Session on Harmonic Analysis & PDE, Montreal, Canada, Fall 2023.
- 6. American Mathematical Society Fall Southeastern Sectional Meeting Session on Topics in Harmonic Analysis and PDE, University of South Alabama, Fall 2023.
- 7. Clemson University College of Science Rising Star Symposium, Fall 2023.
- 8. American Mathematical Society Spring Southeastern Meeting Session on Harmonic Analysis, Georgia Institute of Technology, Spring 2023.
- 9. ICERM's Extremal Problems in Harmonic Analysis, Convexity, and Bellman Functions, Brown University, Fall 2022.
- 10. Canadian Mathematical Society Summer Meeting Session on Harmonic Analysis and Partial Differential Equations, Online, Summer 2021.
- 11. Southeastern Analysis Meeting (SEAM) University of Florida, Spring 2021.

Contributed talks:

- 1. International Workshop on Operator Theory and its Applications (IWOTA) University of Helsinki, Summer 2023.
- 2. Great Plains Operator Theory Symposium (GPOTS) Washington University in St. Louis, Summer 2022.
- 3. Prairie Analysis Seminar Kansas State University, Fall 2021.
- 4. Ohio River Analysis Meeting (ORAM) University of Cincinnati, Spring 2019.
- 5. Southeastern Analysis Meeting (SEAM) University of Alabama, Spring 2019.
- 6. Southeastern Analysis Meeting (SEAM) Georgia Institute of Technology, Spring 2018.

Conferences, Seminars, and Workshop Participation:

Organized:

1. Clemson University Analysis Seminar, Fall 2020 – Present.

- (with Chun-Yen Shen and Daniel Spector) NCTS Conference on Fractional Integrals and Related Phenomena in Analysis - National Taiwan University, Summer 2024, Fall 2022.
- 3. (with Mishko Mitkovski and Yujia Zhai) Southeastern Analysis Meeting 39 (SEAM 39) Clemson University, Spring 2023.

Attended:

- 1. International Conference on Harmonic Analysis, PDE, and GMT in Bilbao University of the Basque Country, Summer 2023.
- 2. Elias M. Stein Memorial Conference Princeton University, Summer 2023.
- 3. Guido Weiss Memorial Conference Washington University in St. Louis, Fall 2022.
- 4. Southeastern Analysis Meeting (SEAM) University of Tennessee, Spring 2017.

Long Term Visits:

- 1. University of Cincinnati, Spring 2024 (1 week).
- 2. Concordia University, Spring 2023 (1 week).
- 3. University of Alabama, Summer 2022 (1 week).
- 4. University of Alabama, Summer 2021 (1 week).
- 5. University of Florida, Spring 2021 (2 weeks).
- 6. Okinawa Institute of Science and Technology, Spring 2020 (3 weeks).

Research Programs:

- 1. Nebraska IMMERSE University of Nebraska-Lincoln, Summer 2015.
- 2. Complexity Across Disciplines (CAD) REU Boise State University, Summer 2014.
- 3. Kent State Mathematics REU, Kent State University Summer 2013.

Teaching:

Classes Taught:

Clemson University:

- 1. Math 8210 Linear Analysis, Fall 2023, Spring 2023.
- 2. Math 9270 Functional Analysis, Fall 2023, Fall 2022.
- 3. Math 3110 Linear Algebra, Summer 2022.
- 4. Math 2080 Introduction to Ordinary Differential Equations, Spring 2022.
- 5. Math 4350 Complex Variables, Fall 2021.
- 6. Math 4530 Advanced Calculus I, Fall 2021.
- 7. Math 1060 Calculus of One Variable I, Summer 2021.
- 8. Math 8310 Fourier Series, Spring 2021.
- 9. Math 1080 Calculus of One Variable II (2 sections), Fall 2020.

Washington University in St. Louis:

- 1. Math 100 Foundations for Calculus, Summer 2019, Fall 2018, Summer 2018, Fall 2017, Summer 2017, Summer 2016.
- 2. Math 1011 Introduction to Statistics, Summer 2019.
- 3. Math 100 Foundations for Calculus, Fall 2018.
- 4. Math 100 Foundations for Calculus, Summer 2018.
- 5. Math 3200 Elementary to Intermediate Statistics and Data Analysis, Spring 2018.
- 6. Math 100 Foundations for Calculus, Fall 2017.
- 7. Math 100 Foundations for Calculus, Summer 2017.
- 8. Math 1011 Introduction to Statistics, Spring 2017.
- 9. Math 220 Finite Mathematics: Number Theory, Combinatorics, and Graphs, Summer 2016.
- 10. Math 100 Foundations for Calculus, Summer 2016.

Independent Studies:

- 1. Fall 2023: Cody Waters (Undergraduate).
- 2. Spring 2023: Jack Taylor (Undergraduate), Cody Waters (Undergraduate).
- 3. Fall 2022: Brandon Cook (Graduate), Freeman Slaughter (Graduate).

Teacher's Assistant:

- 1. Math 233 Calculus III, Spring 2019 (Washington University in St. Louis).
- 2. Math 131 Calculus I, Fall 2016 (Washington University in St. Louis).
- 3. Math 212 Differential Equations, Fall 2013 (Bucknell University).
- 4. Math 202 Calculus II, Fall 2012 (Bucknell University).

Awards and Honors:

1. Dean's Award for Teaching Excellence (Honorable Mention) - Washington University in St. Louis, 2018.

Mentoring:

- 1. Graduate Resource Corp Office of Student Success Washington University in St. Louis, Spring 2018 Fall 2019.
- 2. Math Circle Washington University in St. Louis, Fall 2016, Spring 2016, and Fall 2015.