

Curriculum Vitae – Cody B. Stockdale

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Clemson University
School of Mathematical and Statistical Sciences

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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, Complex Analysis, Operator Theory, Partial Differential Equations.

Grants Awarded:

1. National Science Foundation – DMS # 2247845 “Conference: Southeastern Analysis Meeting 39,” 03/01/2023 – 02/29/2024, \$35,695 (Co-PIs: Mishko Mitkovski and Yujia Zhai).

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 P. Villarroya and B. D. Wick) *Sparse domination results for compactness on weighted spaces*, Collect. Math. **73** (2022), no. 3, 535–563.

5. (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.
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*, Electron. J. Combin. **23** (2016), no. 3 #P3.36.

Publications (submitted or preprints):

1. (with C. Waters) *A compactness criterion for pseudodifferential operators via localization*, arXiv:2409.150996 (2024). [Submitted]
2. (with Z. Nieraeth) *Endpoint weak-type bounds beyond Calderón-Zygmund theory*, arXiv:2409.08921 (2024). [Submitted]
3. (with Z. Nieraeth and B. Sweeting) *Weighted weak-type bounds for multilinear singular integrals*, arXiv:2401.15725 (2024). [Submitted]
4. (with M. Mitkovski) *On the $T1$ theorem for compactness of Calderón-Zygmund operators*, arXiv:2309.15819 (2023). [Submitted]
5. (with Z. Nieraeth and N. A. Wagner) *Sharp weak-type bounds for the Bergman projection with Bekolle-Bonami weights*. [In Preparation]
6. (with D. Cruz-Uribe) *To A_∞ and beyond – operator dependent weighted theory*. [In Preparation]
7. (with D. Spector and D. Stolyarov) *An atomic decomposition of $B\dot{V}$* . [In Preparation]

Students Advised:

Master’s Students:

1. Oscar Ramirez - Clemson University, Fall 2024 – Present.

Undergraduate Students:

1. Jackson Turner - Clemson University, Spring 2025 – Present
2. Cody Waters - Clemson University, Fall 2023 – Present.
Goldwater Scholar 2024.

Awards and Honors:

1. National Science Foundation Graduate Research Fellowship Program (Honorable Mention), 2017.

2. 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. Georgetown University - Department of Mathematics and Statistics Colloquium, Fall 2024.
2. National Taiwan Normal University - Department of Mathematics Colloquium, Spring 2024.
3. Clemson University - School of Mathematical and Statistical Sciences Colloquium, Spring 2022.
4. Lafayette College - Mathematics Department Colloquium, Spring 2021.

Seminar Talks:

1. Auburn University - Analysis and Stochastic Analysis Seminar, Spring 2025.
2. Washington University in St. Louis - Analysis Seminar, Spring 2025.
3. Tufts University - Analysis Seminar, Spring 2025.
4. Basque Center for Applied Mathematics - Analysis and PDE Seminar, Spring 2024.
5. National Taiwan Normal University - Analysis Seminar, Spring 2024.
6. Louisiana State University - Harmonic Analysis Seminar, Spring 2024.
7. University of Cincinnati - Analysis Seminar, Spring 2024 (2 talks).
8. Brown University - Analysis Seminar, Fall 2023.
9. National Taiwan Normal University - Analysis Seminar, Fall 2023.
10. University of Calgary - Analysis Seminar, Spring 2023.
11. Concordia University - Analysis Seminar, Spring 2023.
12. Charles University - International Prague Seminar on Function Spaces, Spring 2023.
13. Ghent University - Ghent Methusalem Junior Seminar, Spring 2022.
14. Louisiana State University - Harmonic Analysis Seminar, Fall 2021 (2 talks).
15. Clemson University - Analysis Seminar, Fall 2020.
16. Okinawa Institute of Science and Technology - Nonlinear Analysis Unit Seminar, Fall 2020.
17. Georgia Institute of Technology - Analysis Seminar, Fall 2020.
18. Okinawa Institute of Science and Technology - Nonlinear Analysis Unit Seminar, Spring 2020.
19. 2TART Online Seminar Series, Fall 2020.
20. University of Arkansas - Analysis Seminar, Spring 2020.
21. Washington University in St. Louis - Analysis Seminar, Spring 2020.

22. Texas A&M University - Mathematical Physics and Harmonic Analysis Seminar, Fall 2019.
23. Washington University in St. Louis - Analysis Seminar, Spring 2019.
24. University of Missouri - Analysis Seminar, Spring 2019.
25. Washington University in St. Louis - Analysis Seminar, Spring 2018.
26. Washington University in St. Louis - Graduate Student Seminar, Spring 2019, Fall 2018, Fall 2017, Fall 2016, and Spring 2016.
27. Bucknell University - Algebra Etc. Seminar, Fall 2014.

Conference Talks:

Invited plenary talks:

1. Expanding Pathways in Harmonic Analysis - Washington University in St. Louis, Spring 2025.
2. International Conference on Mathematics and its Applications in Science and Engineering - Yildiz Technical University, Spring 2025.
3. Southeastern Analysis Meeting - University of Florida, Spring 2021.

Invited talks:

1. AMS Fall Eastern Sectional Meeting - Session on Recent Advances in Harmonic Analysis, University at Albany, Fall 2024.
2. AMS Fall Eastern Sectional Meeting - Session on Harmonic Analysis, Theory of Functional Spaces and Their Applications, University at Albany, Fall 2024.
3. AMS Fall Central Sectional Meeting - Session on Harmonic Analysis, Geometric Measure Theory, and PDE, University of Texas at San Antonio, Fall 2024.
4. European Congress of Mathematics - Mini-symposium on Function Spaces and Related Topics, Seville, Spain, Summer 2024.
5. AMS Spring Central Sectional Meeting - Session on Recent Advances in Harmonic Analysis, University of Wisconsin - Milwaukee, Spring 2024.
6. AMS Spring Southeastern Sectional Meeting - Session on Geometric Measure Theory and Partial Differential Equations, Florida State University, Spring 2024.
7. Canadian Mathematical Society Winter Meeting - Session on Harmonic Analysis & PDE, Montreal, Canada, Fall 2023.
8. AMS Fall Southeastern Sectional Meeting - Session on Topics in Harmonic Analysis and PDE, University of South Alabama, Fall 2023.
9. Clemson University - College of Science Rising Star Symposium, Fall 2023.
10. International Workshop on Operator Theory and its Applications (IWOTA) - University of Helsinki, Summer 2023.
11. AMS Spring Southeastern Meeting - Session on Harmonic Analysis, Georgia Institute of Technology, Spring 2023.
12. ICERM's Extremal Problems in Harmonic Analysis, Convexity, and Bellman Functions, Brown University, Fall 2022.

13. Canadian Mathematical Society Summer Meeting - Session on Harmonic Analysis and Partial Differential Equations, Online, Summer 2021.

Contributed talks:

1. Great Plains Operator Theory Symposium - Washington University in St. Louis, Summer 2022.
2. Prairie Analysis Seminar - Kansas State University, Fall 2021.
3. Ohio River Analysis Meeting - University of Cincinnati, Spring 2019.
4. Southeastern Analysis Meeting - University of Alabama, Spring 2019.
5. Southeastern Analysis Meeting - Georgia Institute of Technology, Spring 2018.

Long Term Visits:

1. Basque Center for Applied Mathematics, Spring 2024 (1 week).
2. National Taiwan Normal University, Spring 2024 (2 weeks).
3. University of Cincinnati, Spring 2024 (1 week).
4. Concordia University, Spring 2023 (1 week).
5. University of Alabama, Fall 2022 (1 week).
6. University of Alabama, Fall 2021 (1 week).
7. University of Florida, Spring 2021 (2 weeks).
8. Okinawa Institute of Science and Technology, Spring 2020 (3 weeks).

Research Program Participation:

1. Nebraska IMMERSE - University of Nebraska-Lincoln, Summer 2015 (6 weeks).
2. Complexity Across Disciplines REU - Boise State University, Summer 2014 (9 weeks).
3. Kent State Mathematics REU, Kent State University - Summer 2013 (8 weeks).

Teaching:

Classes Taught:

Clemson University:

1. Math 8220 - Measure and Integration, Spring 2025.
2. Math 8230 - Complex Analysis, Fall 2024.
3. Math 4350 - Complex Variables, Fall 2024, Fall 2021.
4. Math 8210 - Linear Analysis, Fall 2023, Spring 2023.
5. Math 9270 - Functional Analysis, Fall 2023, Fall 2022.
6. Math 3110 - Linear Algebra, Summer 2022.
7. Math 2080 - Introduction to Ordinary Differential Equations, Spring 2022.
8. Math 4530 - Advanced Calculus I, Fall 2021.
9. Math 1060 - Calculus of One Variable I, Summer 2021.
10. Math 8310 - Fourier Series, Spring 2021.

11. 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. Spring 2025: Oscar Ramirez (Graduate).
2. Fall 2023: Cody Waters (Undergraduate).
3. Spring 2023: Jack Taylor (Undergraduate), Cody Waters (Undergraduate).
4. 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.

Service:

Research Community Service:

Conferences Organized:

1. (with Chun-Yen Shen and Daniel Spector) NCTS Conference on Fractional Integrals and Related Phenomena in Analysis - National Taiwan University, Spring 2024, Fall 2022.

2. (with Mishko Mitkovski and Yujia Zhai) Southeastern Analysis Meeting 39 (SEAM 39) - Clemson University, Spring 2023.

Special Sessions Organized:

1. (with A. Walton Green, Brandon Sweeting, and Nathan A. Wagner) JMM Special Session on New Directions in Harmonic Analysis - Seattle, WA, Spring 2025.

Seminars Organized:

1. (with Quyuan Lin) Clemson University Analysis Seminar, Fall 2020 – Present.

NSF Service:

1. NSF Panelist, 2024.

Undergraduate 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., Integral Equations Operator Theory, 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., Rocky Mountain J. Math.

Reviewer for:

Math Reviews (18), SpringerBriefs in Mathematics.

Departmental Service:

Ph.D. Committee Service:

1. Deborpita Biswas - Clemson University, 2025 (Anticipated).
2. Trevor Camper - Clemson University, 2025 (Anticipated).
3. Dongwei Chen - Clemson University, 2024.
4. Travis Alvarez - Clemson University, 2023.
5. Scott Scruggs - Clemson University, 2023.

Master's Committee Service:

1. Tyler Catoe - Clemson University, 2025 (Anticipated).
2. Michael Hernandez - Clemson University, 2025 (Anticipated).
3. Fabrice Razafimahatratra - Clemson University, 2025 (Anticipated).
4. Bradley Stich - Clemson University, 2025 (Anticipated).

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.