

Brett D. Wick

Washington University – St. Louis
Department of Mathematics
One Brookings Drive
St. Louis, MO 63130–4899

Phone: 314-935-6765
Fax: 314-935-6839
wick@math.wustl.edu
<http://www.math.wustl.edu/~wick/>

Education:

Brown University
Ph.D. in Mathematics, June 2005
Sc.M. in Mathematics, May 2003

University of Houston
B.S. in Mathematics, May 2001
Minor in Physics, May 2001

Professional Experience:

Full Professor of Mathematics, Washington University - St. Louis, Summer 2017 – Present.

Director of Graduate Studies, Washington University - St. Louis, Summer 2017 – Present.

Associate Professor of Mathematics, Washington University - St. Louis, Fall 2015 – Summer 2017.

Director of Postdoctoral Teaching Effectiveness, School of Mathematics, Georgia Institute of Technology, Fall 2013 – Summer 2015.

Associate Professor of Mathematics, Georgia Institute of Technology, Fall 2012 – Summer 2016.

Assistant Professor of Mathematics, Georgia Institute of Technology, Fall 2009 – Summer 2012.

Palmetto Assistant Professor of Mathematics, University of South Carolina, Fall 2007 – Summer 2009.

Assistant Professor of Mathematics, Vanderbilt University, Fall 2005 – Summer 2007.

Visiting Positions:

Poste Rouge, Université Orleans and Université de Nantes, Spring 2017 (3 months).

Poste Rouge, Université Bordeaux, Summer 2015 (1 month).

Oberwolfach Simons Visiting Professor, Universität des Saarlandes, Summer 2014.

Professeur Invité, Université Paul Sabatier – Toulouse, Summer 2013.

Bucknell Distinguished Visiting Professor, Fall 2009, Fall 2010.

Professeur Invité, Université Paul Verlaine – Metz, Summer 2009.

Research:

Awards and Honors:

Fellow of the American Mathematical Society.

NSF CAREER Award, Fall 2010 – Spring 2015.

Alexander von Humboldt Research Fellow, Spring 2010 – Spring 2012.

American Mathematics Society Fan Fund Exchange Fellow, Summer 2013.

Georgia Tech College of Sciences 2014 Faculty Mentor Award.

Georgia Tech Class of 1969 Teaching Scholar, Fall 2012.

Jerrold E. Marsden Postdoctoral Fellow, Fields Institute, Spring 2008.

Wallenberg Postdoctoral Fellow, Swedish Royal Institute of Technology, Fall 2007.

Grants Awarded:

1. National Science Foundation – DMS # **1560955** “Applications of Harmonic Analysis to Function Theory and Operator Theory”, 08/17/15 – 7/31/2018, \$180,001.
2. National Science Foundation – DMS # **1344199** “MCTP: A Postdoctoral Program for Interdisciplinary Mathematics Preparation And Career Training (IMPACT) in the School of Mathematics at the Georgia Institute of Technology”, 09/15/14 – 8/31/2019, \$1,299,994 (Co-Principal Investigator).
3. National Science Foundation – DMS # **1241272** “NSF/CBMS Regional Conference in the Mathematical Sciences: Uncertainty Principles in Harmonic Analysis: Gap and Type Problems”, 09/15/12 – 8/31/2013, \$35,050 (Co-Principal Investigator).
4. National Science Foundation – DMS # **1200994** “The Corona Problem: Connections Between Operator Theory, Function Theory and Geometry”, 11/01/11 – 10/31/2012, \$18,000.
5. National Science Foundation – DMS # **1001098** “Function Theory and Operator Theory via Harmonic Analysis on the Polydisc”, 06/01/10 – 05/31/13, \$53,003.
6. National Science Foundation – DMS # **0955432** “CAREER: An Integrated Proposal Based on the Corona Problem”, 08/01/10 – 07/31/15, \$449,439.
7. National Science Foundation – DMS # **0969431** “SEAM XXVI Georgia Institute of Technology Spring 2010”, 01/01/10 – 12/31/10, \$24,300.
8. National Science Foundation – DMS # **0555896** “Investigations on the Corona Problem and a Study of Multi-Parameter Harmonic Analysis”, 08/16/06 – 07/31/09, \$80,867.

Publications:**Highlights:**

66 Publications; 53 appearing on Mathscinet

282 Citations by 197 authors

Editor of 2 books

Significant Publications:

1. Bergman-type Singular Operators and the Characterization of Carleson Measures for Besov–Sobolev Spaces on the Complex Ball, (with A. Volberg), *Amer. J. Math.*, **134** (2012), no. 4, 949–992.
2. The Corona Theorem for the Drury-Arveson Hardy space and other holomorphic Besov–Sobolev spaces on the unit ball in \mathbb{C}^n (with Ş. Costea and E. Sawyer), *Anal. PDE*, **4** (2011), no. 4, 499–550.
3. BMO Estimates for the $H^\infty(\mathbb{B}_n)$ Corona Problem (with Ş. Costea and E. Sawyer), *J. Funct. Anal.* **258** (2010), no. 11, 3818–3840.
4. Bilinear Forms on the Dirichlet Space (with N. Arcozzi, R. Rochberg and E. Sawyer), *Anal. PDE* **3** (2010), no. 1, 21–47.
5. Stabilization in $H^\infty_{\mathbb{R}}(\mathbb{D})$, *Publ. Mat.* **54** (2010), no. 1, 25–52.
6. Analytic Projections, Corona Problem and Geometry of Holomorphic Vector Bundles (with S. Treil), *J. Amer. Math. Soc.* **22** (2009), no. 1, 55–76.
7. A Note About Stabilization in $A_{\mathbb{R}}(\mathbb{D})$, *Math. Nachr.* **282** (2009), no. 6, 912–916.
8. The Bass and Topological Stable Ranks of $H^\infty_{\mathbb{R}}(\mathbb{D})$ and $A_{\mathbb{R}}(\mathbb{D})$ (with R. Mortini), *J. Reine Angew. Math.* **636** (2009), 175–191.
9. Multi-Parameter Riesz Commutators (with M. Lacey, S. Petermichl, and J. Pipher), *Amer. J. Math.* **131** (2009), no. 3, 731–769.
10. The Matrix-Valued H^p Corona Problem for the Disk and Polydisk (with S. Treil), *J. Funct. Anal.* **226** (2005), no. 1, 138–172.

Talks, Conferences, and Workshops:**Highlights:**

Colloquia: 28

Seminar Talks: 63

Workshops or Conferences Talks: 58

Number of times a Plenary Speaker: 21

Conferences Organized: 7

Major Invited Talks:

Fields Institute 20th Anniversary “Back to Fields Colloquium”, Summer 2012.

24th International Conference on Operator Theory, Timisoara, Romania, July 2-7 2012.

The Corona Problem: Connections between Operator Theory, Function Theory and Geometry, Fields Institute, June 18-22 2012.

Great Plains Operator Theory Symposium, University of Houston, May 29 - June 3, 2012.

Invited Address, American Mathematical Society Southeast Sectional Meeting, Georgia Southern University, March 12-13, 2011.

Professional Service:

Scholarly Service:

Referee and Review Service:

Member of the NSF Division of Mathematical Sciences Panel (3).

Member of the NSF Division of Mathematical Sciences CAREER Panel.

Reviewer for Israel Science Foundation Grant Proposals.

Reviewer for The Royal Society of New Zealand Marsden Fund Grant Proposals.

Reviewer for Natural Sciences and Engineering Research Council of Canada (NSERC) Proposals (3).

Reviewer for The Croatian Science Foundation.

External Reviewer for PhD Theses: University of Helsinki, University of Toulouse, University of Barcelona.

Reviewer for the Bulletin of the American Mathematical Society

Reviewer for Math Reviews (57).

Reviewer for Zentralblatt Math (76).

Referee for: Ann. Acad. Sci. Fenn. Math., Acta Math. Sci. Ser. B Engl. Ed., Adv. Math., Adv. Pure Appl. Math., Amer. J. Math. (2), Ann. Inst. Fourier, Ann. Mat. Pura Appl., Appl. Comput. Harmon. Anal., Bull. Korean Math. Soc., Bull. Sci. Math., Canad. J. Math. (3), Canad. Math. Bull. (2), Collect. Math. (2), Commun. Contemp. Math., Commun. Pure Appl. Anal., Complex Anal. Oper. Theory (7), Complex Var. Elliptic Equ. (2), CRM Monograph Series, European J. Math., Forum Math., Glasg. Math. J. (2), Houston J. Math. (2), Illinois J. of Math., Indiana Math. J. (3), Integral Equations Operator Theory (6), Int. Math. Res. Not. (2), Israel J. Math. (2), J. Aust. Math. Soc., J. Anal. Math., J. Eur. Math. Soc., J. Fourier Anal. Appl. (3), J. Franklin Inst., J. Funct. Anal. (18), J. Funct. Spaces Appl., J. Geo. Anal. (2), J. London Math. Soc. (6), J. Math. Anal. Appl. (3), J. Reine Angew. Math. (2), Math. Control Signals Systems, Math. Nachr. (2), Math. Res. Lett., Michigan Math. J., Potential Anal. (2), Oper. Matrices, Proc. Amer. Math. Soc.

(11), Proc. Edinb. Math. Soc., Proc. Roy. Soc. Edinburgh Sect. A, Pub. Mat. (2), Rev. Mat. Iberoam. (3), Studia Math. (2), Trans. Amer. Math. Soc. (4), Misc. Conference Proceedings (5).

Editorial Service:

Editor for [Analysis Mathematica](#), Spring 2017 – Present.

Editor for [New York Journal of Mathematics](#), Spring 2015 – Present.

Associate Editor for [Complex Analysis and its Synergies](#), Spring 2013 – Present.

Editor for [IMHOTEP: African Journal of Pure and Applied Mathematics](#), Spring 2012 – Present.

Departmental Service:

Washington University – St. Louis:

Department of Mathematics Executive Committee, Fall 2016 - Spring 2017.

Department of Mathematics Hiring Committee, Fall 2016 - Spring 2017.

Department of Mathematics Graduate Committee, Fall 2015 - Spring 2016.

Georgia Institute of Technology:

School of Mathematics Postdoc Committee, Fall 2013 - Spring 2014.

School of Mathematics Junior P&T Committee, Fall 2013 - Spring 2015.

School of Mathematics Graduate Committee, Spring 2012 - Spring 2014.

University Service:

Washington University – St. Louis:

Graduate School, Teaching and Professional Development Committee Fall 2017 - Spring 2018.

Mentoring Activities:

Postdoctoral Fellows Mentored:

[Michael Hartz](#), Washington University – St. Louis, Fall 2016 – Present.
Alexander von Humboldt Foundation Feodor Lynen Research Fellow

[Irina Holmes](#), Washington University – St. Louis, Fall 2014 – Spring 2017.
National Science Foundation Mathematical Sciences Postdoctoral Research Fellow

[Kelly Bickel](#), Georgia Institute of Technology, Fall 2013 – Spring 2014.
First Employment: Bucknell University

[Mishko Mitkovski](#), Georgia Institute of Technology, Fall 2010 – Spring 2012.
First Employment: Clemson University

PhD Students Advised:

Cody Stockdale, Washington University – St. Louis, Fall 2016 – Present.

Marie-Jose Saad, Washington University – St. Louis, Spring 2016 – Present.

Darío Mena Arias, Georgia Institute of Technology, Ph.D., Fall 2014 – Present.

Ishwari Kunwar, Georgia Institute of Technology, Ph.D., Fall 2014 – Summer 2017.

Thesis Title: Multilinear Dyadic Operators and Their Commutators

First Position: Fort Valley State University

Philip Bengé, Washington University – St. Louis, Fall 2013 – Spring 2017.

Thesis Title: Paraproducts and Well Localized Operators

First Position: Mississippi Mathematics and Science High School

Robert Rahm, Washington University – St. Louis, Ph.D., Fall 2013 – Spring 2017.

Thesis Title: Weighted Inequalities for Three Operators

First Position: Postdoctoral Fellow at Texas A&M University

James Scurry, Georgia Institute of Technology, Ph.D., Fall 2008 – Spring 2013.

Thesis Title: One and Two Weight Theory in Harmonic Analysis

Best PhD Thesis in the School of Mathematics Academic Year 2012 – 2013