

JEFFREY PAUL WHEELER
CURRICULUM VITAE

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EDUCATION

- 2008 Ph.D., University of Memphis, Memphis, TN
Dissertation: *The Cauchy-Davenport Theorem and the Erdős-Heilbronn Problem for Finite Groups*
Supervisor: Dr. Paul Balister
Committee Members: Paul Balister, Béla Bollobás, James Campbell, Tsz Ho Chan, Cecil Rousseau, András Sárközy
- 2002 M.Sc., University of Tennessee, Knoxville, TN
Thesis: *The ABC Conjecture*
Supervisor: Dr. Pavlos Tzermias
- 1990 B.A., Miami University, Oxford OH
Major: Mathematics and Statistics, Minor: Social Work

AREAS OF INTEREST

Combinatorics, Number Theory, and Algebra.

POSITIONS HELD

—TEACHING

- 2009-10 Assistant Instructor, University of Pittsburgh
2009 Adjunct Faculty, Tepper Business School, Carnegie Mellon University
2008-2009 Adjunct Faculty, University of Pittsburgh
2008 Adjunct Faculty, Duquesne University
2002-2008 Graduate Teaching Assistant, University of Memphis
2004-2005 Instructor, Rhodes College, Memphis, TN
1998-2002 Graduate Teaching Assistant, University of Tennessee, Knoxville
1996-1998 Graduate Teaching Assistant, Miami University, Oxford, OH
1990-1996 Lecturer, Belmont Technical College, St. Clairsville, OH

—ADMINISTRATIVE

- 1994-1996 Evening/Weekend Coordinator, Belmont Technical College, St. Clairsville, OH

—OTHER RELATED

2002-2003	Tutor, the University of Memphis
2000-2002	President of the Mathematics & Statistics Graduate Student Association, UT-K
1998-2002	Private Tutor, Knoxville, TN
1997-1998	Graduate Resident Advisor, Evans Scholars House, Miami University, Oxford, OH (duties included providing study skills seminars)
1990-1996	Tutor, Belmont Technical College, St. Clairsville, OH
1989-1990	Peer Advisor (a study skills tutor), Miami University, Oxford, OH

Please let me state that I left Miami for UT - Knoxville since Miami did not have a PhD. program (not finishing the Master's at MU gave me one more sitting on the qualifying exams at UT-K). As well, I left UT-K due to my wife being offered an incredible job with FedEx in Memphis.

PUBLICATIONS

PAPERS:

Accepted:

1. PAUL BALISTER, JEFFREY PAUL WHEELER, "The Erdős-Heilbronn Problem for Finite Groups", *Acta Arithmetica* 139 (2009), 185-197.
2. FABRICIO BENEVIDES, JONATHAN HULGAN, NATHAN LEMONS, CORY PALMER, AGO-ERIK RIET, JEFFREY PAUL WHEELER, "Additive Properties of Pairs of General Sequences", *Acta Arithmetica* 140 (2009), 105-118.

Submitted:

3. PAUL BALISTER, JEFFREY PAUL WHEELER, "The Cauchy-Davenport Theorem for Finite Groups", submitted to *the Electronic Journal of Combinatorics*.

NOTES:

1. JONATHAN HULGAN, JEFFREY PAUL WHEELER, "Constant Ratio Sequences", *Pi Mu Epsilon Journal*, Spring 2008.

ADDITIONAL WRITING:

1. "The abc Conjecture" - Master's Thesis.
 - cited on the *The ABC Conjecture Home Page* maintained by Abderrahmane Nitaj.
 - #4 document when Googling "the abc Conjecture".
 - many REUs exploring the abc Conjecture have used my Master's Thesis as a text.

WORKS IN PROGRESS

1. "An Inverse Theorem for the Erdős-Heilbronn Problem for Finite Groups".
2. "h-fold Convergence of Sumsets".

ACADEMIC VISITS

June-July 2005	Trinity College, Department of Pure Mathematics and Mathematical Statistics, University of Cambridge, Cambridge, England
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AWARDS

2008	First Place	Math and Computer Science division of the 20th Annual Student Research Forum, University of Memphis
2005	Recipient	Graduate Assistant Teaching Award, University of Memphis
2002	Finalist	Dorothy & Edgar D. Graves Graduate Teaching Award, Un. of Tennessee-Knoxville
2001	Recipient	Dorothy & Edgar D. Graves Graduate Teaching Award, Un. of Tennessee-Knoxville
2000	Finalist	Dorothy & Edgar D. Graves Graduate Teaching Award, Un. of Tennessee-Knoxville
1999	Finalist	Dorothy & Edgar D. Graves Graduate Teaching Award, Un. of Tennessee-Knoxville
1998	Finalist	Graduate Teaching Award, Miami University
1997	Finalist	Graduate Teaching Award, Miami University
1988	Third Place	Sophomore Mathematics Exam, Miami University

TEACHING EXPERIENCE

Please read student evaluations from the University of Pittsburgh, the University of Memphis, and Rhodes College at ratemyprofessor.com.

–UNIVERSITY OF PITTSBURGH

Abstract Algebra (senior level)	1 section
Introduction to Theoretical Mathematics	1 section
Calculus III	3 large sections
Calculus II	3 large sections
Calculus I	4 large sections

–Includes supervising recitation TAs and graders.

–CARNEGIE MELLON UNIVERSITY

Mathematical Models for Consultants	a Tepper Business course (taught twice)
Additive Combinatorics	taught part of this graduate course

–DUQUESNE UNIVERSITY

Calculus I	1 section
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–UNIVERSITY OF MEMPHIS

Foundations of Mathematics	1 large section
Mathematical Experiences	1 section
Elementary Calculus	2 sections
College Algebra & Trigonometry	1 large section
Calculus I	2 sections
Honors Calculus I	1 section
Calculus II	2 sections
Discrete Structures	3 sections
Introduction to Proofs/Fundamentals of Mathematics	2 sections
<i>reading course: Number Theory</i> ¹	1 section
<i>reading course: Adv. Topics in Discrete Mathematics</i> ²	1 section
<i>reading course: Galois Theory</i>	1 section

¹ For the final exam, the student presented a proof of the Law of Quadratic Reciprocity.

² For the final exam, the student [a freshman] gave a presentation of the Stirling Numbers of the First and Second Kinds to a panel of faculty.

Additionally, at Memphis, I have assisted in teaching special sections of Elementary Calculus and Honors Calculus II. I have also taught 2 continuing education courses on ACT prep.

–RHODES COLLEGE, MEMPHIS, TN	
Fall 2004	Applied Calculus
Spring 2005	Calculus II
–UNIVERSITY OF TENNESSEE-KNOXVILLE	
Finite Math	2 sections
Precalculus	7 sections (including 1 large section)
Business Calculus	recitation
Calculus II	recitation
–MIAMI UNIVERSITY, OXFORD, OHIO	
Precalculus	1 section
Calculus I	3 sections
–BELMONT TECHNICAL COLLEGE [QUARTERS SYSTEM]	
Intro to College Math I	4 sections
Intro to College Math II	2 sections
Prealgebra	15 sections
Elementary Algebra I	16 sections
Elementary Algebra II	12 sections
Math Study Skills	1 section
College Business Math	1 section
Allied Health Math	1 section
Tech Math I	1 section
Engineering Math I	1 section
Precalculus	4 sections
Physics I	2 sections
Physics II	1 section
Engineering Chemistry	1 section
Intro to Polymer Chemistry	1 section
Engineering Mechanics I	1 section
<i>reading course:</i> Calculus I	1 section
<i>reading course:</i> History of Mathematics	1 section
<i>designed and taught:</i> Intro to Logic	1 section

Additionally I taught at least 4 continuing education courses on site.

RESEARCH TALKS

15. Oct 22, 2009 “A Proof of the Erdős-Heilbronn Problem Using the Polynomial Method of Alon, Nathanson, and Ruzsa,” Algebra, Combinatorics, and Geometry Seminar, **University of Pittsburgh**.
14. Apr 15, 2009 Colloquium Speaker, **University of Tennessee, Knoxville** [“The Erdős-Heilbronn Problem for Finite Groups,”].
13. Oct 30, 2008 “The Erdős-Heilbronn Problem for Finite Groups,” ACO Seminar, **Carnegie Mellon University, Pittsburgh**.
12. Sept 25, 2008 “The Erdős-Heilbronn Problem for Finite Groups,” Algebra, Combinatorics, and Geometry Seminar, **University of Pittsburgh**.
11. May 16-18, '08 “The Erdős-Heilbronn Problem for Finite Groups,” International Conference on Interdisciplinary Mathematical Techniques [IMST 2008 -FIM XVI]; **University of Memphis**.
10. April 25-26, '08 “The Erdős-Heilbronn Problem for Finite Groups,” 46th Midwestern Conference on Graph Theory (MIGHTY XLVI); **West Virginia University**, Morgantown, WV.
9. Feb 21, 2008 “The Erdős-Heilbronn Problem for Finite Groups,” Chat Yin Ho Memorial Conference on Combinatorics and Groups, the **University of Florida**.
8. Nov 27, 2007 “The Erdős-Heilbronn Problem for Finite Groups,” Graph Theory and Combinatorics Seminar, **The University of Illinois at Urbana-Champaign**.
7. Nov 9, 2007 “Additive Properties of Two General Sequences,” Combinatorics Seminar, the **University of Memphis**.
6. Oct 27, 2007 “The Erdős-Heilbronn Problem for Finite Groups,” 2007 Integers Conference, **University of West Georgia**, Carrollton, Georgia.
5. March 19, 2007 “The Erdős-Heilbronn Problem for Finite Groups,” **Miami University**, Oxford, Ohio.
4. March 16, 2007 “A Survey of the Cauchy-Davenport Theorem and the Erdős-Heilbronn Conjecture,” *AMS Spring Central Section Meeting*, **Miami University**.
3. Nov 10, 2006 “The Erdős-Heilbronn Problem for Finite Groups,” Combinatorics Seminar, the **University of Memphis**.
2. April 3, 2006 “The Cauchy-Davenport Theorem for Finite Groups,” **West Virginia University**.
1. Feb 24, 2006 “The Cauchy-Davenport Theorem for Finite Groups,” Combinatorics Seminar, the **University of Memphis**.

INVITED TALKS

2. Feb 1, 2010 “A Polynomial Analog of Fermat’s Last Theorem,” *University of Pittsburgh Mathematics Club*.
1. Sept 28, 2006 “A Polynomial Analog of Fermat’s Last Theorem,” *University of Memphis Undergraduate Mathematics Club [The Cantor Sect]*.

CONFERENCES ATTENDED

May 16-18, 2008	International Conference on Interdisciplinary Mathematical Techniques [IMST 2008 -FIM XVI]; The University of Memphis
April 25-26, 2008	46 th Midwestern Conference on Graph Theory (MIGHTY XLVI); West Virginia University, Morgantown, WV
March 27-28, 2008	<i>Paul Erdős Memorial Lecture Series</i> , University of Memphis
February 21-24, '08	<i>Chat Yin Ho Memorial Conference on Combinatorics and Groups</i> , the University of Florida.
January 6-9, 2008	<i>AMS/MAA Joint Meetings - 2008</i> , San Diego, California.
October 24-27, 2007	<i>Integers Conference - 2007</i> , University of West Georgia
May 4-5, 2007	31 st <i>SIAM-SEAS Meeting</i> , University of Memphis –General Sessions Chair
April 21-22, 2007	<i>Random Combinatorial Structures</i> , University of Nebraska-Lincoln
March 23-24, 2007	<i>Paul Erdős Memorial Lecture Series</i> , University of Memphis
March 16-17, 2007	<i>AMS Spring Central Section Meeting</i> , Miami University
March 24-25, 2006	<i>Paul Erdős Memorial Lecture Series</i> , University of Memphis
October 21-23, 2005	<i>AMS Fall Central Section Meeting</i> , University of Nebraska-Lincoln
February 25-26, '05	<i>Paul Erdős Memorial Lecture Series</i> , University of Memphis
March 26-27, 2004	<i>Paul Erdős Memorial Lecture Series</i> , University of Memphis
March 8-12, 2004	35 th <i>Southeastern International Conference on Combinatorics, Graph Theory, and Computing</i> , Florida Atlantic University
March 21-22, 2003	<i>Paul Erdős Memorial Lecture Series</i> , University of Memphis

RESEARCH-RELATED GRANTS

April 2008	Travel grant 46 th <i>Midwestern Conference on Graph Theory (MIGHTY XLVI)</i> , West Virginia University
February 2008	Travel grant <i>Chat Yin Ho Memorial Conference on Combinatorics and Groups</i> , the University of Florida
October 2007	Travel grant <i>Integers Conference 2007</i> , West Georgia University
April 2007	Travel grant <i>Random Combinatorial Structures</i> , University of Nebraska-Lincoln
March 2007	Travel grant <i>AMS Spring Central Section Meeting</i> , Miami University
Summer 2006	Research grant
Summer 2005	Research grant
March 2004	Travel grant 35 th <i>Southeastern International Conference on Combinatorics, Graph Theory, and Computing</i> , Florida Atlantic University

PROFESSIONAL SOCIETIES

1996-present	American Mathematical Society
xxxx-present	Mathematical Association of America

NOTABLE STUDENTS

DeAngelo Williams
 Tamika Catchings (who asked me to deliver a message to Wally Szczerbiak)
 Instrumental in taking a freshman from a D in Calc 1 to the Memphis Putnam Team.

BIOGRAPHICAL INFORMATION

- Born and raised in Wheeling, WV.
- Wife, Jamie, is a Senior Marketing Analyst for FedEx - Services in Moon, PA. In addition to other awards, Jamie has received the Five-Star Award for Excellence, FedEx's highest award, from founder and CEO Fred Smith while working for FedEx - Corporate, Memphis.
- Daughter born in May, 2006.
- Son born in October, 2008.
- My Erdős Number is 3.
- I am an academic nephew of Andrew Wiles.