

# STEPHEN J. TREFETHEN

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CONTACT INFORMATION      Department of Mathematics      *Phone:* (315) 379-5585  
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RESEARCH INTERESTS      My primary research interests are in group theory and representation theory of finite groups. I have also done research combining complex analysis and linear algebra during an REU as an undergraduate.

ACADEMIC EMPLOYMENT      **University of Arizona**, Tucson, Arizona USA      **August 2011-Present**  
Department of Mathematics  
  
Instructor  
Graduate Teaching Assistant  
Graduate Research Assistant

EDUCATION      **University of Arizona**, Tucson, Arizona USA  
  
GPA: 4.0 out of 4.0  
Advisor: Dr. Pham Huu Tiep  
Qualifying exams completed: August 2012  
Oral comprehensive exam completed: May 2014  
Coursework in Mathematics:  
    year-long sequences in Algebra, Real Analysis, Geometry/Topology;  
    year-long sequence in Group Theory;  
    year-long sequence in Algebraic Number Theory;  
    year-long sequence in Lie Groups and Lie Algebras;  
    topics course on Homological Algebra;  
    topics course on Linear Algebraic Groups;  
    topics course on Associative Algebras;  
    topics course on Commutative Algebra;  
    topics course on Automorphic Representations;  
    course in Quantitative Methods (Economics);  
    course in Algorithms, Graphs, and Networks

**State University of New York College at Potsdam**, Potsdam, New York USA

M.A., Mathematics; May 2011  
GPA: 3.95 out of 4.00  
Graduated with Distinction

**State University of New York College at Potsdam**, Potsdam, New York USA

B.A., Mathematics; May 2011  
GPA: 3.98 out of 4.00  
Graduated with Honors, Summa cum laude

MEMBERSHIPS      American Mathematical Society (AMS), Mathematical Association of America (MAA), American Physics Society



shop. Tucson, Arizona. March 10, 2014.

*On the Existence of Large Zsigmondy Primes.* University of Arizona Research Tutorial Group Mini-Conference. Tucson, Arizona. December 6, 2012.

*Hypercyclicity and Subspace Hypercyclicity in Infinite Dimensional Hilbert Space.* Young Mathematicians Conference, The Ohio State University, 2011.

*Hypercyclicity and Subspace Hypercyclicity in Infinite Dimensional Hilbert Space.* St. Lawrence Valley Undergraduate Mathematics Conference, Clarkson University, 2010.

CONFERENCE  
ATTENDANCE

(upcoming) Finite Simple Groups: Thirty Years of the Atlas and Beyond. Princeton, New Jersey. November 2-5, 2015. Funded participant.

(upcoming) American Mathematical Society Western Sectional Meeting Fall 2015. Fullerton, California. October 24-25, 2015. Invited presenter.

Simple groups, representations, and related topics. Cambridge University, Cambridge, UK. July 13-15, 2015. Funded participant.

Southwestern Group Theory Day 2015. Tucson, Arizona. March 21, 2015.

American Mathematical Society Central Sectional Meeting Spring 2015. East Lansing, Michigan. March 14-15, 2015. Invited presenter.

Sigma Xi Research Conference. Glendale, Arizona. November 7-8, 2014. Presenter.

Southwestern Group Theory Day 2014. Tucson, Arizona. November 2, 2013.

TEACHING  
EXPERIENCE

**University of Arizona**, Tucson, Arizona USA

*TA for Math 196V-Vector Calculus Problem Session* **Fall 2015**  
Assisted Dr. Tyler Kloefkorn in teaching students in the supplementary multivariable calculus course for undergraduate students. Duties included monitoring problem sessions and formulating problem sets.

*Instructor for Math 129-Calculus II with Applications* **Fall 2015**  
Served as an independent instructor for a calculus course. Duties included preparing and delivering all lectures as well as writing and grading exams, quizzes, and homework, and holding office hours.

*Instructor for Math 122B-Calculus I with Applications* **Summer 2015**  
Served as an independent instructor for a first semester calculus course. Duties included preparing and delivering all lectures as well as writing and grading exams, quizzes, and homework, and holding office hours.

*Instructor for Math 125-Calculus I with Applications* **Fall 2014**  
Served as an independent instructor for an accelerated calculus course. Duties included preparing and delivering all lectures as well as writing and grading exams, quizzes, and homework, and holding office hours.

*Super TA for Math 511-Abstract Algebra* **Academic Year 2013-2014**  
Assisted Dr. Romyar Sharifi in teaching students in the first year abstract algebra core course for the mathematics graduate students. Duties included grading homework and holding problem/review sessions and office hours.

*Instructor for Math 122B-Calculus I with Applications* **Fall 2013**  
Served as an independent instructor for a first semester calculus course. Duties included preparing and delivering all lectures as well as writing and grading exams, quizzes, and homework, and holding office hours.

*TA for Math 196L-Precalculus Problem Session* **Spring 2013**  
Assisted Scott Clark in teaching students in the supplementary precalculus course for undergraduate students. Duties included monitoring problem sessions and formulating problem sets.

*Instructor for Math 120-R Calculus Prep* **Spring 2013**  
Served as an independent instructor for a precalculus course. Duties included preparing and delivering all lectures, writing and grading exams, quizzes, and homework, and holding office hours.

*Super TA for Math 323-Formal Mathematical Reasoning* **Fall 2012**  
Assisted Dr. Sunhi Choi in teaching students in a course aimed at introducing undergraduate math majors to mathematical reasoning and writing proofs. Duties included holding office hours and grading homework.

*Instructor for Math 112-College Algebra* **Spring 2012, Fall 2012**  
Served as an independent instructor for a college algebra course. Duties included preparing and delivering all lectures, writing and grading exams, quizzes, and homework, and holding office hours.

OUTREACH AND  
SERVICE

*Graduate Student Representative* **Academic Year 2015-16**  
Responsibilities included: assisting with recruitment activities and meeting with potential students, attending meetings of the Graduate Committee, addressing student concerns and bringing them to the attention of the Committee, organizing informal graduate student meetings with visiting speakers.

*Algebra and Number Theory Seminar Co-Organizer* **Spring 2015**  
Responsibilities included: submitting abstracts to the department website, coordinating lunch with speakers, and sending emails to speakers and attendees.

*Recruitment Workshop* **March 2014, 2015**  
The recruitment workshop is a yearly workshop to recruit potential graduate students through a series of student and faculty talks, and trips to explore Tucson and the surrounding areas. Duties included: presenting on representation theory, taking students to dinner, transporting students to and from their hotel, and serving on a panel of senior graduate students to answer potential students' questions about the program.

*Integration Workshop* **August 2013**  
The integration workshop is a yearly workshop to integrate new graduate students through a series of lectures, problem sessions, and a small project. Served on a panel of senior graduate students to answer new students' questions about the program.

CITIZENSHIP

I am a citizen of the United States of America.