Kellen Myers

Curriculum Vitae

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Rutgers University,
The State University of New Jersey
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Education

Ph.D. Mathematics, Rutgers University, 2015 (anticipated)

Title: *Computational Advances in Rado Numbers* (tentative)

Advisor: Doron Zeilberger

Committee: Doron Zeilberger, Neil Sloane, Bruce Landman (tentative)

B.A. Mathematics, Colgate University, 2008

Advisors: Aaron Robertson, Ken Valente, Thomas Tucker

Minor: Physics.

Honors: *Magna Cum Laude*, High Honors in Mathematics, Phi Beta Kappa, Distinction in the Liberal Arts Core Curriculum

High School Diploma, Texas Academy of Mathematics and Sciences, 2003

Research Publications

2015: "A Survey on Rado Numbers," in preparation

2015: "Some Three Color Rado Numbers," in preparation.

2014: "Nonlinear Rado Numbers," in preparation.

2014: "A Note on a Question of Erdős & Graham," arχiv e-print.

2008: "Some Two Color, Four Variable Rado Numbers,"
With Aaron Robertson, in *Advances in Applied Mathematics* 41 (2), 214-226.

2007: "Two Color Off-Diagonal Rado-Type Numbers,"

With Aaron Robertson, in *Electronic Journal of Combinatorics* 14(1), R53.

Other Publications

Kellen Myers, "Modeling, Activity, & Engagement in Intermediate Engineering Mathematics," in preparation.

DIMACS Center, Rutgers University, Mathematics Association of America, "DIMACS Research Experiences for Undergraduates (REU) Program: Graph Theory, Algorithms, and Applications Annual Report," September 2012. (Coauthor)

Kellen Myers et al., "Modeling Crop Rotation with Discrete Mathematics" in DIMACS Sustainability Modules for Core Math Classes, forthcoming.

Various contributions to the Online Encyclopedia of Integer Sequences

e.g. A135918, A135919, A162672, A250026

Chris Mackeprang & Kellen Myers, Coloring Graphs on Sponges, Problem 11208, Amer. Math. Monthly 114 (November 2007), solutions p. 842.

Kellen Myers, "Rado and Rado-Type Numbers," High Honors Thesis, Colgate University, Dec 2007.

Honors & Awards

Fellowships

2012-2015: Rutgers Academy for the Scholarship of Teaching & Learning Fellowship

2008-2010: Henry C. Torrey Fellowship

2004-2008: Charles A. Dana Scholarship

2004-2007: Summer Research Assistantships (Mathematics, Physics)

2004: Research Assistantship, "Tucker's Group of Genus 2" under Tomaž Pisanski

Awards

2014 Rutgers RDI^2 Competitive Research Award

Allocation of 4M SU on the Excalibur IBM Blue Gene System

2013 NSF MPE2013+ Travel Award to Joint Math. Meetings ($1600)

2012 Rutgers Department of Mathematics TA Teaching Excellence Award

2008-2010 Torrey Fellowship, Rutgers University (Stipend & Tuition)

2008: Bachelor's Degree includes the honors: *Magna Cum Laude*, High Honors in Mathematics, Phi Beta Kappa, Distinction in the Liberal Arts Core Curriculum

2008: Colgate University Osborne Prize in Mathematics

2007: Colgate University Edwin J. Downie '33 Prize in Mathematics

2003-2008: Colgate University Dean's Awards

2004-2007: Colgate University Charles A. Dana Scholarship

2005: COMAP MCM Honorable Mention

2004: Admitted to Phi Eta Sigma Honors Society

2003: NSA USA Mathematical Talent Search (USAMTS) Honorable Mention

Academic Employment Experience

Rutgers University, Department of Mathematics

2014-2015 Graduate Assistantship

2010-2013 Teaching Assistantship

2008-2010 Graduate Fellowship

Rutgers University, DIMACS

2013-present: Fefferman Lab Consulting Programmer

2013 CISE REU PI Meeting Co-organizer

2011 & 2012: DIMACS REU Graduate Coordinator

2011-2012: CCICADA/DHS Report Preparation Assistant

Colgate University

2003-2008: Teacher's Assistant, Grader, Tutor

2004-2008 Research Assistant (various)

Teaching Experience

Rutgers University

Summer 2012, 2013, 2014: Summer Head TA
(Head TA for all summer graduate student TAs & instructors)

Summer 2013, 2014: Course Instructor
Math 244 - Differential Equations for Physicists and Engineers

Fall 2013 - Spring 2014: Course Instructor
Math 252 - Elementary Differential Equations

Fall 2012 - Spring 2013: Teaching Assistant
Math 244 - Differential Equations for Physicists and Engineers

Summer 2011 - Spring 2012: Head Teaching Assistant
Math 135 - Calculus 1 for the Social and Biological Sciences

Summer 2011: WeBWorK Coordinator
Math 135 - Calculus 1 for the Social and Biological Sciences

Fall 2010 - Spring 2010: Teaching Assistant
Math 135 - Calculus 1 for the Social and Biological Sciences

Colgate University

2003-2008: Teacher's Assistant, Grader, Tutor
Calculus sequence, Number Theory / Introduction to Proofs, etc.

Mentorship & Outreach

2009-2011 Directed Reading Program Mentor
Fall 2009: Emily Sergel, "Graph Theory"
Spring 2011: Aron Samkoff, "Lie Algebras"
Summer 2011: Aron Samkoff, "Lie Algebras pt 2"

Summer 2011, 2012: DIMACS REU Mentor
2012 Mentor for Adrian Galicia, "Interactive Rado Numbers"
2011 Co-mentor for Daniel Brown, "Finding Green Traffic Routes"

Speaking Experience

Conferences, Seminars, Panels, & Presentations

2013 Rutgers 4th Annual Graduate Student Mentorship Workshop
>   Invited Panelist

2013 MAA Regional Faculty Workshop on REUs
>   Invited Panelist

2013 INTEGERS (Electronic J. of Combinatorial Number Theory) Conference
>   "A Systematic, Computational, and Automated Approach to Rado Numbers"

2013 Graduate Student Combinatorics Conference (GSCC)
>   "Rado Numbers: A Systematic Approach"

2013 Joint Mathematics Meeting, MPE2013 Session
>   Working Group on Curriculum Development and Educational Modules

2012 Graduate Student Combinatorics Conference (GSCC)
>   "L^p-discrepancy on Hypergraphs"

2007 INTEGERS Conference
>   "Results on Standard and Off-Diagonal Rado Numbers"

2006 Hudson River Undergraduate Mathematics Conference (HRUMC)
>   "Off-Diagonal Rado Numbers"

Local Seminars & Presentations

DIMACS REU Seminar
>   June 11, 2013: "Ramsey Theory Without Words"
>   July 15, 2014: "Ramsey Theory Without Words"

Rutgers Experimental Mathematics Seminar
>   April 24, 2014: "Rado Numbers: Experimental and Computational Methods"
>   Available online: Part 1, Part 2 (at vimeo.com)

Rutgers Graduate Combinatorics Seminar
>   December 10, 2014 "Parallel Computing and Quadratic Rado Numbers"
>   November 13, 2013 "The Calkin-Wilf Tree"

March 13, 2013: "Conway's Angel and Devil"

September 19, 2012: "Modeling and Constructing Crop Rotations"

September 21 2011: "What I Did Last Summer: Pebbling at the REU"

February 23 2011: "Experimental Mathematics in Action"

September 15 2010: "The Fourier Transform and Enumeration"

March 24 2010: "The Genus of Graphs and Groups: An Alliterative Survey"

April 1 2009: "Van der Waerden's Theorem"

October 15, 2008: "Ramsey Theory on the Integers & Rado Numbers"

Rutgers Graduate Pizza Seminar

March 7, 2014: "Analysis You Can Count On"*

March 8, 2013: "Ramsey Theory and Rado Numbers"*

March 2, 2012: "Analysis You Can Count On"*

February 6, 2009: "Ramsey Theory on the Integers"

* Featured in Department Graduate Student Open House

Rutgers Round Table Discussion

Feb 18 2009: "Partial Orders and Lattices"

Oct 14 2009: "Ramsey Theory on the Integers"

Colgate Math Seminar

Fall 2007: "High Honors Thesis Defense"

Fall 2007: "Research in Ramsey Theory"

Spring 2005: "Prime Time"

Professional Activities

Service

2010–Present: Editor for the Online Encyclopedia of Integer Sequences (OEIS)

Rutgers University:

2009-2015: Graduate Liaison Committee, Department of Mathematics

2012-2015: Contributor to official Rutgers Graduate School blog

2012-2014 Student Nominee for University Grievance Committee

2013-2014 Founder, President, Rutgers AMS Graduate Student Chapter

2010-2013: Student Rep., Department Computing Committee

2010–2012: Organizer, DIMACS Graduate Combinatorics Seminar

2011: Aresty Undergraduate Research Symposium Judge

Spring 2010: North Jersey Regional Science Fair (NJRSF) volunteer judge

2009-2010: Co-organizer for Graduate Pizza Seminar

Colgate University:

2003–2008: Volunteer Math Tutoring, Stockbridge Valley High School

2006–2008: Member of University Diversity Council

2006–2008: Student Harassment Liaison Officer

2006: Member of the Cutten Working Group Committee

2006: Member of Committee to Revise Harassment Policy

2006: Special curricular research for Dean of Faculty, under Ken Valente

2004–2006: Facilitator of Safe-Zone training and of Intergroup Dialogues

2005: Co-author, Colgate Campus Climate Report

2004 & 2005: Organizer, Martin Luther King Jr. Day events

Professional Memberships

American Mathematical Society, 2009–Present

Mathematics Association of America, 2005–2008

Society for Industrial and Applied Mathematics, 2012–Present

Instruction & Lectures

2014 Development of "Teaching with Technology" certificate for Rutgers TA Project
Designed math-specific implementation of existing workshop series

2011-2014 TA Project Workshops Presenter, e.g.:
Oct 7, 2014: "Creative Teaching and Active Learning" (Panelist/Moderator)
Nov 12, 2014: "Feedback and Assessment" (Panelist)

2011-2014: New TA Orientation (Panelist)

2012-2015: College Teaching 1 & 2, Guest Lectures

2011-2014 Math Department TA Training, Guest Lectures/Panel Discussions

Conferences Attended

October 2014: R.U. Faculty Council Teaching Conference: Teaching & Technology

October 2014: Challenges of Identifying Integer Sequences, DIMACS / Rutgers U.

February 2014: Learning From Proofs Conference, Rutgers University

April 2013: Symposium in Honor of Tom Tucker, Colgate University

March 2013: NSF CISE REU PI Meeting**

April 2013: Graduate Student Combinatorics Conference, University of Minnesota*

May 2013: Rutgers 4th Annual Graduate Student Mentorship Workshop*

May 2013: MAA Regional Faculty Workshop on REUs*

October 2013: INTEGERS Conference, University of West Georgia*

January 2013: Joint Mathematics Meetings, San Diego*

April 2013: Graduate Student Combinatorics Conference, U. Illinois Urbana-Champaign*

June 2012: Conference on Graphs and Analysis, Institute for Advanced Study

October 2011: INTEGERS Conference, University of West Georgia

June 2010: Workshop on Pseudo-randomness, Institute for Advanced Study

May 2010: From A = B to Z = 60, DIMACS / Rutgers University

May 2009: Ramsey Theory Workshop, DIMACS / Rutgers University

October 2007: INTEGERS Conference, University of West Georgia*

April 2006: HRUMC Conference, St. Lawrence University*

 * Speaker / Presenter / Panelist
 ** Organizer / Co-organizer

Other Experience & Credentials

Certifications

Rutgers Teaching Assistant Project certificate program, with certificates:

Assessment in Higher Education

Issues in Class Management

Professional Development

Participation in Undergraduate Mentorship Workshops with Project AGER

Advanced Level Mathematica Student Certification

Online CITI Certification in NSF Responsible Conduct of Research

Completion of NSF Ethics in Research Course

Completion of College Teaching Sequence (3 courses), Rutgers Graduate School

Computer Skills

Mastery: Maple, Mathematica, Matlab, HTML, CSS, LaTeX

Basic Skills: C, C++, Java, BASIC

Utility: Linux, Windows, Microsoft Office, computer hardware, A/V systems

Other Employment

ETS Outside Writer, SAT & GRE Math, 2010-2012

ETS Assessment Development Internship, Summer 2010

References

Doron Zeilberger
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Rutgers University
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Hadamard Associate Professor
École Polytechnique
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