MALCOLM RUPERT

Curriculum Vitae

School Address
Department of Mathematical Sciences
Clemson University
Clemson, SC, 29631
meruper@clemson.edu
webpages.uidaho.edu/mrupert

Permanent Address
3771 S. 172nd street
Seatac, WA, 98188

EMPLOYMENT

Postdoctoral Fellow — August 2017 – Present
NSF Research Training Group in Coding, Cryptography, and Number Theory
Department of Mathematical Sciences, Clemson University, Clemson, SC

EDUCATION

Ph.D., Mathematics — May 2017
University of Idaho, Moscow, ID
THESIS - An Explicit Theta Lift from Hilbert Modular Forms to Siegel Paramodular Forms.
ADVISORS - J. Johnson-Leung & B. Roberts

M.S., Mathematics — May 2013
University of British Columbia, Vancouver, BC, Canada
THESIS - Expanding Erodős–Kac and The Selberg–Sathe to Beurling Primes
with Controlled Integer Counting Functions.
ADVISOR - G. Martin

B.S., Mathematics, *Magna Cum Laude* — June 2011
Western Washington University, Bellingham, WA

PUBLICATIONS

"Local Test Vectors for the Theta Lift from GSO(4) to GSp(4)", in preparation — 2017

"An Explicit Theta Lift from Hilbert Modular Forms to Siegel Paramodular Forms.", *Ph.D. Thesis*

"The Erdős-Kac Theorem for Beurling Primes" submitted to *INTEGERS: Electronic Journal of Combinatorial Number Theory*. — *2016*

w/ Harrison Chapman, "A Group-theoretic Approach to Human Solving Strategies in Sudoku" — 2012
Colonial Academic Alliance Undergraduate Research Journal
Volume 3 Article 3

HONORS & AWARDS

College of Science Deans Graduate Award, University of Idaho — 2017
Magna Cum Laude, Western Washington University — 2011
Undergraduate Mathematics Fellow, Western Washington University — 2008-2011
Excellence on the Putnam Exam, Western Washington University — 2009,2010

CONFERENCE ACTIVITY

Contributed Presentations

"Some Results on the Local Theta lift from GSO(4) to GSp(4) " 2017
PANTS XXIX, Clemson University, December 2-3
"An Explicit Theta Lift from Hilbert to Siegel Modular Forms"
Automorphic Forms Workshop, East Tennessee State University, March 6-9
"An Explicit Theta Lift from Hilbert to Siegel Modular Forms"
JMM, AMS Special Session on Minimal Integral Models of Algebraic Curves
"Towards an Explicit Theta Lift from Hilbert to Siegel Modular Forms" 2015
Automorphic Forms Workshop, University of Michigan, March 2-5
"A Group-theoretic Approach to Human Solving Strategies in Sudoku", 2011
Joint Math Meetings, January 6-9
"A Group-theoretic Approach to Human Solving Strategies in Sudoku", 2010
Young Mathematicians Conference, August 27-29

Workshop Participant

Sage Days 87, p-adics in Sage and the LMFDB, July 17-22 2017

L-function and Modular Forms Database conference: Computational Representation 2015
Theory in Number Theory, July 27-31

Sage Days 62.25, May 23-27

NSF funded research on the Experimental study of modular forms and L-functions 2014
Universidad de la República, Montevideo, Uruguay, July 8-20

L-function and Modular Forms Database conference on Curves and Automorphic Forms, March 10-14

NSF REU research on Gröbner bases and Sudoku 2010
James Madison University, Harrisonburg, VA, June - August

Attendee

PANTS XXIX, Clemson University, December 2-3 2017
PANTS XXVIII, University of Tennessee Knoxville, September 16-17
Arizona Winter School on Perfectoid Spaces, March 11-17
Joint Mathematics Meeting, Atlanta, January 4-7
Pacific Northwest Number Theory conference, Oregon State University, May 14-15 2016
Arizona Winter School on Arithmetic and Higher-Dimensional Varieties, March 14-18 2015
Arizona Winter School on Arithmetic Statistics, March 15-19 2014
Pacific Northwest Number Theory conference, University of Washington, June 1-2 2013
Pacific Northwest Number Theory conference, University of Idaho, May 19-20 2012
Combinatorics potlatch, Simon Fraser University, November 17
Riemann Zeta Functions Workshop, Simon Fraser University, November 3

CAMPUS PRESENTATIONS

Clemson University
CCNT Seminar, September 4 2017

University of Idaho
Thesis Defense, April 20 2017
Algebra Seminar, April 19 2016
Student Research Expo, November 13 2015

University of British Columbia
Graduate Student Seminar 2013

TEACHING EXPERIENCE

Clemson University

Math 410, Number Theory Fall 2017
Math 319, Introduction to Proof Spring 2018

University of Idaho

Math 130, Finite Math Fall 2016
Math 175, Calculus II Spring 2016, Summer 2014
Math 330, Linear Algebra Fall 2015
Math 275, Calculus III Spring 2015
Math 170 recitations, Calculus I Fall 2014, Fall 2013
Math 160 recitations, Business Calculus Spring 2014
Mathematics Tutor Fall 2013-Spring 2016

University of British Columbia

Math 1** Recitations, Differential Calculus, Fall 2011- Spring 2013
Mathematics Tutor

Western Washington University

Mathematics Fellow & Tutor Fall 2008-Spring 2011

UNIVERSITY SERVICE

Clemson University

MAA Special Session Coding Theory, Cryptography, and Number Theory, Co-organizer March 2018
Number Theory Meetings in the Southeast, National Science Foundation, Co-PI 2017

University of Idaho

Graduate and Professional Student Association Senator. Fall 2016-Spring 2017.

University of British Columbia

Math Learning Center Committee Co-Chair. Spring 2012-Spring 2013

PROFESSIONAL SKILLS

Experienced in Python, SAGE, LaTeX, Mathematica, R, Unix. Some experience with MAGMA and Matlab.

REFERENCES

Jennifer Johnson–Leung, Ph.D.
Associate Professor
Department of Mathematics
University of Idaho
Moscow, Id, 83843
(208) 885-6258
jenfns@uidaho.edu

Brooks Roberts, Ph.D.
Research Associate Professor
Department of Mathematics
University of Idaho
Moscow, Id, 83843
(208) 885-6258
brooksr@uidaho.edu

Greg Martin, Ph.D.
Professor
Department of Mathematics
University of British Columbia
Room 121, 1984 Mathematics Road
Vancouver, BC V6T 1Z2
(604) 822-4371
gerg@math.ubc.ca

Christopher Williams, Ph.D. (Teaching Letter)
Department Chair Mathematics & Statistical Science and Professor
Department of Mathematics
University of Idaho
Moscow, Id, 83843
(208) 885-6742
chrisw@uidaho.edu