

ROBERT W. BENIM

Curriculum Vitae

Department of Mathematics
Boyd Graduate Studies Research Center
University of Georgia Athens, GA 30602
e-mail: rbenim@gmail.com

Education History

- Ph.D. Mathematics, North Carolina State University, 2014.
- M.S. Mathematics, Portland State University, 2010.
- B.S. Mathematics, University of Portland, 2007.

Employment History

- Lecturer, University of Georgia, 2016-Present.
- Visiting Assistant Professor, Pacific University, 2014-2016.
- Teaching Assistant, North Carolina State University, 2010-2014.
- Teaching Assistant, Portland State University, 2008-2010.

Research Interests

I am interested in algebraic groups and symmetric varieties, specifically symmetric varieties which arise from orthogonal and symplectic groups. Recently, I have become more interested in generalizations of these ideas. I have also studied finite group actions of topological surfaces.

Teaching

University of Georgia

- *MATH 2250 Calculus I for Science and Engineering (3 times)*

Pacific University

- *MATH 311 Ordinary Differential Equations (2 times)*
- *MATH 227 Calculus II*
- *MATH 226 Calculus I (2 times)*
- *MATH 165 Modern Topics in Mathematics (2 times)*
- *MATH 125 Precalculus (5 times)*

North Carolina State University

- MA 405 *Introduction to Linear Algebra*
- MA 341 *Applied Differential Equations I (3 Times)*
- MA 242 *Calculus III*
- MA 231 *Calculus for Life and Management Sciences B*
- MA 121 *Elements of Calculus*
- MA 241 *Calculus II Recitations (2 times)*

Portland State University

- MTH 261 *Introduction to Linear Algebra (3 times)*
- MTH 112 *Introduction to College Mathematics II (2 times)*
- MTH 111 *Introduction to College Mathematics I (2 times)*

Journal Articles

- Isomorphism Classes of Finite Order Automorphisms of $SL(2, k)$, (with M. Hunnel and A. K. Sutherland), submitted for publication.
- Isomorphism Classes of k -Involutions of $SO(n, k, \beta)$, $n > 2$, (with C. Dometrius, A. G. Helminck, and L. Wu), 2016, *Journal of Lie Theory*, Volume 26, 383-438.
- Isomorphism Classes of Involutions of $SP(2n, k)$, $n > 2$, (with A. G. Helminck, and F. Jackson Ward), 2015, *Journal of Lie Theory*, Volume 25, 903-947.
- Enumerating Quasiplatonic Cyclic Group Actions, (with A. Wootton), 2013, *Rocky Mountain Journal of Mathematics*, Volume 43, Number 5.
- Classification of Quasiplatonic Abelian Groups and Signatures, 2008, *The Rose-Hulman Undergraduate Mathematics Journal*, Volume 9, Issue 1.

Presentations

- Isomorphism Classes of Finite Order Automorphisms of $SL(2, k)$, Joint Mathematics Meetings, AMS Session on Group Theory and Generalizations, 2016.
- Bilinear Forms, Orthogonal Groups, and Lorentz Transformations, Colloquium at the University of Portland, December 4, 2015.
- Symmetric Spaces, Orthogonal Groups, and Their Generalizations, Second Oregon Liberal Arts Mathematics Colloquium, September 26, 2015.
- Isomorphism Classes of Finite Order Automorphisms of $SL(2, k)$, MAA Pacific Northwest Regional Conference, 2015.
- Isomorphism Classes of Involutions of $SP(2n, k)$, MathFest 2014, Portland, Oregon, 2014.
- Involutions of $SO(n, k, \beta)$ and $SP(2n, k)$, Conference in Honor of 60th Birthday of Loek Helminck, NC State, 2014.
- Inner-Involutions of $SO(n, k, \beta)$, ($n > 2$), Joint Mathematics Meetings, AMS Section on Group Theory, 2014.

- Isomorphy Classes of Inner-Involutions of $SO(n, k, \beta)$, ($n > 2$), NC State Graduate Student Algebra Seminar, 2013.
- Enumerating Quasiplatonic Cyclic Group Actions, Portland State Master's Thesis Presentation, 2010.
- Classification of Quasiplatonic Abelian Groups and Signatures, MAA Pacific Northwest Regional Conference, 2007.
- An Introduction to the Tribonacci Sequence, MAA Pacific Northwest Regional Conference, 2005.

Awards

- *Mathematics Department Outstanding Teaching Assistant (North Carolina State University), 2012.*
This is an annual award given to a select few of the teaching assistants in the NCSU math department.
- *F. S. Cater Prize in Mathematical Sciences (Portland State University), 2009.*
This is awarded annually for outstanding academic achievements to masters students in the Portland State math department.
- *Ron Smit Award in Mathematics (University of Portland), 2007.*
This is awarded annually to one outstanding graduating senior in the math department at the University of Portland.

Other Activities and Skills

- *Textbook Reviewer*
I am a reviewer of the forthcoming second edition of *Calculus: Early Transcendentals* by Sullivan Miranda.
- *Funded Attendee of 8th Southeastern Lie Theory Workshop on Algebraic and Combinatorial Representation Theory at North Carolina State University on October 9-11, 2015*
I received travel funding through the conference organizers to attend.
- *Co-organizer of First Annual Oregon Liberal Arts Mathematics Colloquium, Spring 2015*
I assisted in the organizing of this event that brought faculty mathematicians together from the seven liberal arts colleges in Oregon.
- *Paper Reviewer, 2015-Present*
On request, I review scholarly papers that have been submitted for publication in various journals.
- *Mathematics Reviews (AMS), 2014-Present*
On request, I write reviews for peer-reviewed mathematics articles for the AMS that can be seen at <http://www.ams.org/mathscinet/>.
- *Graduate School Panel (University of Portland), 16 September 2014*
This was a panel session aimed at giving undergraduate STEM students information regarding graduate school. Specifically, the topics of applications, school choice, and graduate school student life were discussed.
- *Preparing for the Professoriate Program (North Carolina State University), 2012-2013.*
This program gives a select few distinguished teaching assistants throughout the university the chance to shadow a faculty mentor as they teach an upper division course, and then to teach it themselves the following semester.

- *Programming Experience*

I have programming experience with Maple, C++, and Java. I have used Maple and C++ for various computational portions of my research, and I have also used Maple with Calculus classes to give them experience with a Computer Algebra System.

- *Tutoring Experience*

Throughout the vast majority of my undergraduate and graduate careers, I worked in department run tutoring centers. I also spent several years doing private tutoring on the side.