

Rade Musulin

✉ musulin@math.sc.edu
📄 <http://people.math.sc.edu/musulin/>

Education

- 2013–2018 **Ph.D, Mathematics**, *University of South Carolina*, Columbia, SC, Expected 2018.
2009–2013 **B.S., Mathematics**, *Lander University*, Greenwood, SC, *Summa Cum Laude*, *Honors Program Graduate* (4.0 Institutional GPA, 3.9 Overall GPA).
2010 **University of Winchester**, *Study Abroad Experience-Fall*, Winchester, England.

Experience

- 2013–present **Graduate Teaching Assistant**, *University of South Carolina*, Columbia, SC.
Classes Taught as Instructor of Record
- Analysis I - Summer 2017
 - Calculus I - Spring 2017
 - Calculus II - Spring 2018
 - Vector Calculus - Summer 2015
 - Precalculus Mathematics - Fall 2017
 - Elementary Differential Equations - Summer 2016
 - Finite Mathematics - Spring 2015
 - Basic Concepts of Elementary Mathematics I - Fall 2015, Spring 2016, Fall 2016
 - Basic Concepts of Elementary Mathematics II - Fall 2016
 - Intensive Basic College Mathematics - Fall 2014
- Acted as a Lab Instructor for Calculus I in Fall 2013, Spring 2014, Spring 2016, Spring 2017, and Fall 2017. Acted as a Lab instructor for Calculus II in Summer 2014. Acted as a Recitation Leader in Fall 2013, Spring 2014, and Spring 2017.
- 2007–present **Private Mathematics Tutor**, *University of South Carolina*, Columbia, SC.
Tutored students in Analysis, Abstract Algebra, Linear Algebra, Discrete Mathematics, Number Theory, Elementary Education Mathematics, Calculus, Trigonometry, Differential Equations, Statistics, High School Algebra, High School Geometry, High School Statistics, and Middle School Mathematics. Prepared students for the SAT and for the PRAXIS I.
- 2015–2017 **Stratergy: Chess and Games Instructor**, *Columbia, SC*.
Taught after-school chess programs in various elementary and middle schools.
- 2007–present **Private Chess Coach**, *Hilton Head Island, SC, Columbia, SC*.
Privately instructed various elementary and middle school students.
- 2011–2013 **Kids Kamp Counselor**, *Hilton Head Plantation Property Owners' Association* ,
Hilton Head Island, SC.
Worked with rising second and third grade children.
- 2010–2013 **Server and Nutrition Consultant**, *Hilton Head Health*, Hilton Head Island, SC.
Served food for guests.

Publications

Accepted

- [1] G. Androulakis, R. Musulin, *A connection between mixing and Kac's chaos.*

Submitted

- [1] G. Androulakis, R. Musulin, *Quantum Kac's chaos.*

Leadership Positions

- 2015–2018 **Vice-President**, *Gamecock Chess and Go Club*, University of South Carolina.
Coordinated meeting times and advertised. Coordinated the participation of the University of South Carolina in the 2015 and 2016 Pan American Intercollegiate Team Chess Championship.
- 2009–2013 **President**, *Lander University Chess Club*, Lander University.
Coordinated meeting times and advertised.
- 2006–2008 **Teaching Fellow**, *South Carolina Teaching Fellows Program*, Lander University.
Contributed to writing a blog describing what is new in K-12 education monthly. Attended monthly meetings discussing new ways to promote education throughout the state. Completed 30 hours of education related community serves per semester.

Honors and Awards

- 2016-2017 Outstanding Graduate Student Award, University of South Carolina
- 2013-2014 Outstanding First Year Graduate Student Award Honorable Mention, University of South Carolina
- 2013 Thayer Award - Highest GPA of Graduating Class, Lander University
- 2012 Mathematical Association of America Award, Lander University
- 2012 Member of Alpha Chi National Honors Society, Lander University
- 2010 Physics-Calculus Award, Lander University
- 2006, 2008, 2009, and 2011 South Carolina Amateur Chess Champion
- 2006 and 2007 South Carolina High School Chess Champion

Talks

- "Propagation of Quantum Kac's Chaos in Spohn's Model", Analysis Seminar, University of South Carolina, Columbia, SC, November 2017
- "Kac's Chaos and Quantum Kac's Chaos", Carolina Math Seminar, Benedict College, Columbia, SC, November 2017
- "A Connection Between Mixing and Kac's Chaos" (Invited Talk), Carolina Math Seminar, Lander University, Greenwood, SC, March 2017
- "Mixing and Chaos", Analysis Seminar, University of South Carolina, Columbia, SC, November 2016
- "Law of the Iterated Logarithm", Stochastic Analysis Seminar, University of South Carolina, Columbia, SC, April 2016
- "Propagation of Quantum Chaos (Part 2)", Analysis Seminar, University of South Carolina, Columbia, SC, April 2016
- "Propagation of Quantum Chaos (Part 1)", Analysis Seminar, University of South Carolina, Columbia, SC, March 2016

- “Transcendental Numbers and the Impossibility of Squaring the Circle”, Undergraduate Senior Project and Talk, Lander University, April 2013
- “Think Quickly” on math games which reinforce middle school mathematics concepts, South Carolina Council of Teachers of Mathematics Conference, Myrtle Beach, SC, October 2012
- “Integrating Children’s Literature into Mathematics” on teaching mathematical concepts through children’s literature, South Carolina Council of Teachers of Mathematics Conference, Myrtle Beach, SC, October 2012

Conferences and Workshops Attended

- Carolina Math Seminar, Benedict College, Columbia, SC, November, 3, 2017
- Virginia Operator Theory and Complex Analysis Meeting 2017, University of Virginia, Charlottesville, VA, October 28, 2017
- AMS Fall Southeastern Sectional Meeting, University of Central Florida, Orlando, Orlando, FL, September 23-24, 2017
- Carolina Math Seminar, Lander University, Greenwood, SC, March 24, 2017
- AMS Spring Southeastern Sectional Meeting, College of Charleston, Charleston, SC, March 10-12, 2017
- “QMath 13: Mathematical Results in Quantum Physics”, Georgia Tech, Atlanta, GA, October 8-11, 2016
- AMS Spring Southeastern Sectional Meeting, University of Georgia, Athens, GA, March 5-6, 2016
- “Quantum Markov Semigroups in Analysis, Physics and Probability”, Oaxaca, Mexico, August 23-28, 2015
- “Recent Developments in Positive Characteristic Techniques in Commutative Algebra: Frobenius Operators and Cartier Algebras”, Atlanta, GA, March 13-15, 2015
- South Carolina Council of Teachers of Mathematics Conference, Myrtle Beach, SC, October 12-14, 2012