

Artem Hulko

Curriculum Vitae

January 21, 2022

Contact Virginia Tech
Information: Department of Mathematics
 460 McBryde Hall
 225 Stanger St. Blacksburg, VA 24061

EDUCATION

University of North Carolina at Charlotte

Ph.D. in Applied Mathematics, May 2018

Thesis: *Estimates for the number of eigenvalues of non-self-adjoint operators*

Advisor: Dr. Oleg Safronov

University of South Carolina Upstate

B.S. in Mathematics, May 2013

EMPLOYMENT HISTORY

Virginia Polytechnic Institute and State University

Aug. 2019 – present. Visiting Assistant Professor of Mathematics

Tusculum University

Aug. 2018 – July 2019. Assistant Professor of Mathematics

University of North Carolina at Charlotte

Aug. 2013 - May 2018. Graduate Teaching Assistant

(Duties include teaching courses and tutoring at the Math Learning Center managed by the Mathematics Department)

University of South Carolina Upstate

- Spring 2012: Undergraduate Research Assistant
- Fall 2012: Teaching Assistant for a College Algebra Course at the Math and Computer Science department
- Spring 2011 – Spring 2012: Supplemental Instruction Leader for the Student Success Network
- Fall 2010 – Spring 2012: Mathematics Tutor for Department of Mathematics and Computer Science
- Spring 2010 – Spring 2013: Individual Tutor for Student Success Network

COURSES TAUGHT

Basic College Mathematics	Calculus II
Liberal Arts Math	Differential Equations
College Algebra	Linear Algebra
Trigonometry	Linear Algebra (Honors section)
Pre-Calculus	Introduction to Proofs
Business Calculus	Modern Algebra

Teaching Assistant (UNCC)

Calculus III	Calculus II
Differential Equations	Linear Algebra
Modern Algebra	

TEACHING SOFTWARE SKILLS

Moodle, Canvas, Blackboard, Hawkes Learning, MyLab Math, WeBWorK, WebAssign

SERVICE

2021

- Served as a course coordinator for Math 2114 (Intro to Linear Algebra) course.
- Served on Graduate Teaching Assistant teaching certification committee.
- Conducted teaching observations of other faculty members and wrote reports on those observations.

2020

- Serving on Common Time Exam committees for Intro. Linear Algebra, Calculus I, and Calculus II courses.
- Helped with redesigning Math 2114.
- Helped to coordinate Math 1225 (Calculus I) course.

2019

- Created Master syllabi for Precalculus and Linear Algebra courses.
- Assisted with organization and proctoring TMTA (Tennessee Mathematics Teachers Association) math contest for high school students.
- Represented the university by visiting local high schools to talk to math teachers about the university.
- Served as a faculty advisor for Math Club
- Gave a talk at the Math Club meeting. Title: *Game Theory All Around Us*.
- Served on hiring committees to find a new IT faculty, as well as Math faculty.

2018

- Helped to develop new schedule for when math classes should be offered to allow students to graduate on schedule and for core courses to be offered every other year.

PROFESSIONAL DEVELOPMENT

- Member of the American Mathematical Society
- Attended Project NExT – SE meetings at the MAA Southeastern meeting at Lee university in March 2019

RESEARCH INTERESTS

Functional Analysis, Spectral Theory, Scattering Theory, Game Theory

PUBLICATIONS

1. **A. Hulko**, M. Whitmeyer, A game of nontransitive dice. *Mathematics Magazine*, to appear.
Preprint can be found here: <https://arxiv.org/abs/1706.00849>
2. **A. Hulko**, On the number of eigenvalues of the Biharmonic operator on \mathbb{R}^3 with a complex potential. *Reports on Mathematical Physics*, Volume 81, Issue 3, (2018) pp. 373–383.
3. **A. Hulko**, On the number of eigenvalues of the discrete one-dimensional Dirac operator with a complex potential. *Analysis and Mathematical Physics*, (2018).
<https://doi.org/10.1007/s13324-018-0222-z>
4. **A. Hulko**, On the number of eigenvalues of the discrete one-dimensional Schrödinger operator with a complex potential. *Bulletin of Mathematical Sciences*, 7(2) (2017), pp. 219–227.
5. **A. Hulko**, M. Whitmeyer, Information Provision in a Sequential Search Setting. Preprint (2018), <https://arxiv.org/abs/1802.09396>

PRESENTATIONS

1. AMS Spring Southeastern Sectional Meeting at Vanderbilt University, Nashville, TN, April 14-15, 2018. Title: *On the Number of Eigenvalues of the Biharmonic Operator on \mathbb{R}^3* .
2. TexAMP 2017 (University of Texas at Austin) November 3-5, 2017. Title: *Estimates on the number of eigenvalues of the Schrödinger operator on \mathbb{Z}_+ and \mathbb{Z}* .
3. AMS/MAA Joint Annual Meeting, San Diego, January 9-13, 2013. Poster Title: *Mathematical study on the effect of catheter on the peristaltic transport of a viscous fluid*.

4. "8th SC Upstate Research Symposium" held at Milliken INC, Spartanburg, SC on April 12, 2012. Poster Title: *Mathematical study on the effect of catheter on the peristaltic transport of a viscous fluid.*

CONFERENCES ATTENDED

1. Joint Mathematics Meeting, Denver, CO, January 15-18, 2020
2. MAA Southeastern Annual Meeting, Cleveland, TN, March 7-9, 2019
3. AMS Spring Southeastern Sectional Meeting at Vanderbilt University, Nashville, TN, April 14-15, 2018.
4. MAA Southeastern 2018 Conference, Clemson University, March 23-24, 2018
5. TexAMP 2017 at the University of Texas at Austin, November 3-5, 2017
6. AMS/MAA Joint Annual Meeting, San Diego, January 9-13, 2013
7. AMS/MAA Annual Meeting, Boston, MA, January 2012
8. 8th Annual South Carolina Upstate Research Symposium April 20, 2012
9. 7th Annual South Carolina Upstate Research Symposium April 15, 2011
10. MAA Southeastern Annual Meeting, Tuscaloosa, AL, April 1-2, 2011

GRANTS AND AWARDS

1. Travel Grant from AMS to attend the AMS Spring Southeastern Sectional Meeting at Vanderbilt University, Nashville, TN, April 14-15, 2018.
2. Travel Grant from GPSG for presentation at the AMS Spring Southeastern Sectional Meeting at Vanderbilt University, Nashville, TN, April 14-15, 2018.
3. Travel Grant from GPSG to attend the MAA Southeastern 2018 Conference at Clemson University, March 23-24, 2018.
4. Research Presentation Grant from American Mathematical Society for presentation at AMS/MAA Joint Mathematics Meeting, San Diego, January 9-13, 2013.

HONORS

- Nominated for a Favorite Faculty award Spring 2021
- Outstanding Upper Division Mathematics Student, USC Upstate 2012.
- Outstanding Lower Division Mathematic Student, USC Upstate 2011.
- Dean's, Chancellor's, and President's lists for Fall 2009, 2010, 2011, 2012 and Spring 2010, 2011, 2012.

COMPUTER SKILLS

Programming:	MATLAB, Mathematica, SQL, Java
Word processing:	Latex, Microsoft Word
Other:	Microsoft Excel, DegreeWorks