JOHNNY LENN FONSECA

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RESEARCH INTERESTS

Quantum Groups, Representation Theory, Vertex Operator Algebras, Category Theory, and Quantum Knot Invariants

EDUCATION

Rutgers University – *New Brunswick, New Jersey*
Ph.D. Candidate in Mathematics, GPA: 3.909   2018 – Present

Florida International University – *Miami, Florida*
M.S. in Mathematical Sciences, GPA: 3.970   2017 – 2018
B.S. in Mathematics, GPA: 3.950 (Summa Cum Laude)   2015 – 2017
B.S. in Statistics, GPA: 3.950 (Summa Cum Laude)   2015 – 2017

University of Florida – *Gainesville, Florida*
Coursework in Chemical Engineering   2013 – 2014

PROFESSIONAL EXPERIENCE

Rutgers University – *New Brunswick, New Jersey*
Mathematics Instructor for Advanced Calculus for Engineers   May 20202 – July 2020
Graduate Teaching Assistant   Aug. 2018 - Present
Florida International University – *Miami, Florida*
Graduate Teaching Assistant   Aug. 2017 – May 2018
Research Assistant at Computational Cognitive Neuroscience Lab   March 2016 – Aug. 2016
Mathematics Tutor at Student-Athlete Academic Center   June 2016 – Aug. 2016
Learning Assistant   Aug. 2015 – April 2017

PUBLICATIONS AND PRESENTATIONS

- L. Carbone, T. Coelho, J. Fonseca, J. Meng, S. H. Murray, F. Thurman and S. Zhu *Infinite dimensional Lie algebras: commutators and structure constants* In preparation (2020)
- "Continuation of Semisimple Lie Algebras." Graduate Algebra and Representation Theory Seminar of Rutgers. (Sept. 2019)
- "From Abstract Simplicial Complexes to Clique Chains." Math Club of FIU. (Dec. 2017)
- Fabian A. Soto, Emily Zheng, Johnny Fonseca, F. Greg Ashby *Testing Separability and Independence of Perceptual Dimensions with General Recognition Theory: A tutorial and new R package (grtools).* Frontiers in Psychology. (2016)

HONORS AND ORGANIZATIONS

- American Mathematical Society Student Member   2019 – Present
- FIU Outstanding Academic Achievement Certificate   2018
- Phi Beta Kappa Student Member   2017 – Present
- UWS Lucille E. Snaith Memorial Scholarship   2016 – 2017
- Golden Key International Honor Society Student Member   2015 – Present
- Student Government Association of FIU STEM Scholarship   2015 – 2016

SKILLS

Proficient in R, Maple, MATLAB, Python, Java, LaTeX, and Excel.
Intermediate verbal and written Spanish communications skills.