

Curriculum Vitae

Yariana Diaz

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EDUCATION

University of Iowa <i>Doctor of Philosophy, Mathematics</i>	Iowa City, IA <i>Aug. 2018 – Present</i>
University of Iowa <i>Masters of Science, Mathematics</i>	Iowa City, IA <i>Aug. 2018 – Dec. 2020</i>
Amherst College <i>Bachelor of Arts, Mathematics and Music</i>	Amherst, MA <i>Aug. 2014 – May 2018</i>

RESEARCH EXPERIENCE

(with Ryan Kinser) Total Stability of Quiver Representations <i>University of Iowa, Iowa City, IA</i>	<i>2019 – Present</i>
<ul style="list-style-type: none">• Learned and wrote code in Python and GAP to aid in computations	
(with Felice Manganiello) Coding Theory REU <i>Clemson University, Clemson, NC</i>	<i>Summer 2017</i>
<ul style="list-style-type: none">• Presented two talks on mathematical modeling of disease and fractal geometry• Gave three group presentations on original research• Learned math software programs Magma and Sage (Python) to aid in research	

PUBLICATIONS

- [1] Y. Diaz, C. Gilbert, and R. Kinser, “Stability conditions and Auslander-Reiten sequences for Dynkin quivers,” *in preparation*.
- [2] T. Bambaugh, Y. Diaz, S. Friesenhahn, F. Manganiello, and A. Vetter, “Batch codes from Hamming and Reed-Muller codes,” *Journal of Algebra Combinatorics Discrete Structures and Applications*, vol. 5, pp. 153 – 165, 2018.

INVITED PRESENTATIONS

Total Stability Functions for Dynkin Quivers and Almost Split Sequences, AMS Spring Western Sectional Meeting, Special Session on Quivers, Tensors, and Their Applications (virtual, May 1, 2021)

Total Stability Functions for Dynkin Quivers and Almost Split Sequences, AMS Spring Eastern Sectional Meeting, Special Session on Hopf Algebras, Tensor Categories, and Related Homological Methods (virtual, March 20, 2021)

TEACHING EXPERIENCE

Main Instructor, University of Iowa

Calculus I (Spring 2022)

Teaching Assistant, University of Iowa

Abstract Algebra II (graduate level) (online, Spring 2021)

Quantitative Reasoning for Business (online, Fall 2020)

Mathematics for the Biological Sciences (Fall 2019)

Grader, University of Iowa

Introduction to Linear Algebra (Spring 2021)

Engineer Math IV: Differential Equations (partially online, Spring 2020)

SERVICE

Directed Reading Program on Data Analysis with MATLAB and R, Graduate mentor to undergraduate student, University of Iowa (Spring 2022)

Senator, Representative of mathematics graduate students in Graduate Student Senate and Graduate Student Employment Committee, University of Iowa (Fall 2021 & Spring 2022)

Directed Reading Program Organizer, Organized small reading groups between undergraduate and graduate math students, University of Iowa (Fall 2021 & Spring 2022)

Directed Reading Program on Cryptography, Graduate mentor to undergraduate Computer Science student, University of Iowa (online, Fall 2020)

GPSG Grant Reviewer, University of Iowa (Fall 2019 – Spring 2020)

Volunteer Math Tutor, Center for Worker Justice of Eastern Iowa (Summer 2019)

AWARDS

Graduate Diversity Fellowship, University of Iowa (Fall 2021)