

Matias C. Y. Relyea

CONTACT INFORMATION	<i>E-mail:</i> hyanlong@unc.edu <i>Website:</i> quadcryo.github.io/quadcryo/
EDUCATION	University of North Carolina at Chapel Hill , Chapel Hill, North Carolina B.S., Mathematics. Minor, violin performance. August 2025—May 2029 (expected). North Carolina School of Science and Mathematics , Durham, North Carolina High School Diploma, August 2023—May 2025. Graduated.
PUBLICATIONS	[1] Matias C. Y. Relyea. The Quadratic and Cubic Characters of 2. <i>Mathematics Magazine</i> , 2025. <i>Accepted</i> . arXiv preprint (2025): doi.org/10.48550/arXiv.2410.21646 .
PREPRINTS	[2] Matias C. Y. Relyea. On Finite Fields and Higher Reciprocity. arXiv preprint (2024): doi.org/10.48550/arXiv.2407.03559 .
OTHER WRITING	[3] Peyton Jackson, Tatiana Medved, and Matias C. Y. Relyea. “Can You Even?” An Exploration of Polyominoes. <i>North Carolina School of Science and Mathematics Broad Street Scientific</i> , 2025. <i>Accepted</i> ; PDF here . [4] Matias C. Y. Relyea. q -analogues. 2023. PDF here . [5] Matias C. Y. Relyea. A Brief Introduction to Bézier Curves. 2022. PDF here . [6] Matias C. Y. Relyea. Proofs and Applications of Quadratic Reciprocity. 2022. PDF here .
RESEARCH EXPERIENCE	University of North Carolina at Chapel Hill , Chapel Hill, North Carolina UNC Accelerated Research Program. August 2025—May 2029. Directed Reading Program on Category Theory. Fall 2025. North Carolina School of Science and Mathematics , Durham, North Carolina. Number theory and algebraic number theory. Wrote “On Finite Fields and Higher Reciprocity,” “The Quadratic and Cubic Characters of 2.” August 2023—May 2025. Mentored by Professor Tamar Avineri.
SERVICE	University of North Carolina at Chapel Hill , Chapel Hill, North Carolina Undergraduate Learning Assistant • MATH 381 (Discrete Mathematics). Fall 2025.
TECHNOLOGICAL SKILLS	Proficient in \LaTeX , familiar with Python.
LANGUAGES	Fluent in English and Mandarin Chinese.