

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 in violin performance (expected graduation, May 2029). North Carolina School of Science and Mathematics (NCSSM) , Durham, North Carolina High School Diploma, Fall 2023—Spring 2025.
PUBLICATIONS	[1] Matias C.Y. Relyea. The Quadratic and Cubic Characters of 2. Accepted for publication in <i>Mathematics Magazine</i> (forthcoming 2026). 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 Polyominos. Accepted for publication in <i>NCSSM Broad Street Scientific</i> (forthcoming 2026). PDF: quadcryo.github.io/quadcryo/assets/pdf/jackson_medved_relyea_polyominos.pdf . [4] Matias C.Y. Relyea. Proofs and Applications of Quadratic Reciprocity. Summer 2022, <i>Euler Circle</i> . PDF: simonrs.com/eulercircle/irpw2022/matias-quadrec-paper.pdf .
RESEARCH EXPERIENCE	University of North Carolina at Chapel Hill , Chapel Hill, North Carolina UNC Accelerated Research Program, Fall 2025— North Carolina School of Science and Mathematics , Durham, North Carolina. Independent study on number theory and algebraic number theory. Produced one arXiv preprint and one peer-reviewed publication. Presented first paper at NCSSM Research Symposium 2025. August 2023—May 2025. Mentored by Dr. Tamar Avineri. Euler Circle , Mountain View, California Attended Summer 2022 Independent Research and Paper Writing course. Independently produced 44-page expository paper on quadratic reciprocity and its applications. Mentored by Dr. Simon Rubinstein-Salzedo.
TEACHING AND SERVICE	Mathematics Institute of the Triangle , Chapel Hill, North Carolina Mathematics Tutor and Teaching Assistant, Fall 2025— <ul style="list-style-type: none">Provided one-on-one tutoring to students located in Chapel Hill. Assisted teacher with grading and led short problem-solving workshops. University of North Carolina at Chapel Hill , Chapel Hill, North Carolina Undergraduate Learning Assistant <ul style="list-style-type: none">MATH 381 (Discrete Mathematics), Fall 2025. Chapel Hill Math Circle , Chapel Hill, North Carolina Program Volunteer, Fall 2025— <ul style="list-style-type: none">Collaborated with UNC graduate students to assist and lead teaching for various levels of mathematics circle coursework.
TECHNOLOGICAL SKILLS	Proficient in L ^A T _E X, familiar with Python.