Matias C. Y. Relyea

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INFORMATION Website: quadcryo.github.io/quadcryo/

EDUCATION University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

B.S., Mathematics, B.M., Violin concentration. 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. Mathematics Magazine,

2025. Accepted; PDF here.

PREPRINTS [2] Matias C. Y. Relyea. On Finite Fields and Higher Reciprocity. arXiv preprint, 2024:

2407.03559v3, 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. North Carolina School of Science and Mathematics Broad Street

Scientific, 2025. Accepted; 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 University of North Carolina at Chapel Hill EXPERIENCE

Incoming student to UNC Accelerated Research Program.

North Carolina School of Science and Mathematics

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.

TECHNOLOGICAL Proficient in LATEX, familiar with Python.

SKILLS

LANGUAGES Fluent in English and Mandarin Chinese.