Anthony Hojin Lee

 $Curriculum\ Vitae$ anthonylee@kaist.ac.kr

antleee7.github.io

Personal

Born August 6, 2002

Citizenship: United States & South Korea

Education

M.Sc., Mathematics. KAIST, Daejeon, South Korea

2025–2027 (expected)

B.Sc., Mathematics. Seoul National University, Seoul, South Korea

2021 - 2025

Awards

NSF GRFP Honorable Mention, 2025

Dean's List, Spring 2024, Fall 2024

Undergraduate study group award, approx. \$380, Fall 2024

Papers and preprints

Derived categories of K3 surfaces, B.Sc. thesis. (2024)

Teaching

Basic Calculus I, Seoul National University

2022

Undergraduate research projects

Moduli spaces of sheaves, Fourier-Mukai transforms, and Dehn twists. Advised by Jeongseok Oh.

Compact or finite volume Coxeter polytopes in hyperbolic n-space. Advised by Gye-Seon Lee.

Conferences participated

Geometric Langlands Masterclasses, University of Copenhagen

2025

AI for Mathematics Workshop on Formalization, KIAS

2024

Study groups and seminars

Algebra & Geometry of Spaces of Tensors and Applications, DGIST

Graduate Algebraic Geometry Seminar, Seoul National University

Hyperbolic Geometry Seminar, Seoul National University

Study group on Nevanlinna theory, KAIST

Study group on characteristic classes, Seoul National University

Organization

SNU Experimental Geometry Lab

2023-2024

• Founded a student-led mathematics club focused on geometry projects beyond the scope of undergraduate mathematics, with over 15 active members. Advised by Gye-Seon Lee.

• Projects: Interactive code for generating a Penrose tiling with a single complex input, based on N. J. de Brujn's theory of pentagrids. The visualisation of limit points of iterated hyperbolic reflections. Seminars on aperiodic tilings, matrix Lie groups and hyperbolic reflection groups.

Additional experience

K-12 Private Tutor

- $\bullet~1$ student, Korean CSAT calculus, top 23% student resulted in top 4% nationwide. 2023.
- Multiple students at private educational institute, 10–11th grade mathematics, 2022.

Amateur Guitar Player

- \bullet College of Natural Sciences Band Lyrics~Above~Beats,~2021–2023.
- School of Earth and Environmental Sciences Band Jinwon (lit. epicenter), 2022.