# Noam Scully

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### Education

**Yale University** *Pursuing Intensive B.A. in Mathematics.* GPA: 3.78/4.0

New Haven, CT, Class of 2025

*Math courses:* linear algebra, real & complex analysis, vector analysis and manifolds, group theory, Lie theory, measure theory and fourier series, representation theory, Galois theory, commutative algebra, category theory

Other selected courses: quantum mechanics I & II, quantum information and computation, introductory mechanics and electricity & magnetism, intro to cognitive science, George Eliot's *Middlemarch*, Tang dynasty poetry

**Brookline High School** GPA: 4.0/4.0

Brookline, MA, Class of 2020

#### Research

# Visiting Scholar at Boston University Condensed Matter Theory

Summer 2024

Theoretical condensed matter physics research on using the Wigner-Weyl transform for semiclassical approximations. Mentored by Dr. Anatoli Polkovnikov at Boston University.

# Final Research Project for Independent Study in Category Theory

Spring 2024

Studied category theory with Dr. Pablo Boixeda Alvarez of Yale University, concluding with an original research project establishing a category-theoretic generalization of measures and integration.

#### Summer Undergraduate Math Research at Yale (SUMRY REU)

Summer 2023

Geometry and dynamics research, studying saddle connections on translation surfaces with Dr. Taylor McAdam of Pomona College and Dr. Fernando Al Assal of the Max Planck Institute. Paper in preparation.

Yale College First-Year Summer Research Fellowship in the Sciences & Engineering Summer 2022
Astrophysics research on how feedback affects dark matter halos with Dr. Daisuke Nagai at Yale University.

#### Polymath Jr. Research Experience for Undergraduates

Summer 2021

Combinatorics research on lexicographically-least infinite square-free words, mentored by Dr. Eric Rowland of Hofstra University. Published in The Electronic Journal of Combinatorics: https://doi.org/10.37236/11659.

# **Teaching**

#### Yale Poorvu Center for Teaching and Learning - ULA and Private Tutor

2023-

Undergraduate Learning Assistant (ULA) for linear algebra and real analysis, holding office hours and running proof workshops. Private tutor in linear algebra and group theory.

#### Art of Problem Solving - Online Staff Member

2020-21

Classroom assistant, message board moderator, and grader for online math classes.

# Extracurriculars, Skills, and Service

# **Coding Experience**

Familiar with Python, Haskell, LaTeX, HTML/CSS, and Mathematica.

#### Yale Math Department Student Advisory Committee (SAC)

2024-

As a member of the SAC, volunteer with the Yale Math Department to improve the math major and foster community.

### The Purple Crayon of Yale Improv Comedy

2021-

Performer and co-director. Previously served as treasurer and tour organizer.

#### **Grace Hopper Search Advisory Committee for Next Head of College**

2024

Student representative on the search committee for hiring the next Head of Grace Hopper College at Yale.