Gheehyun Nahm

Education	**Princeton University**	2023 – present
	Ph.D. candidate in Mathematics	
	University of Cambridge (Trinity College)	2017 – 2023
	2019 – 2021: leave for mandatory national service	
	BA+MMath; Part II (2022): Class I, rank: 1st/243; Part III (2023): Distinction, rank: 1st/282	
	Seoul National University	2017
	Left after one semester; Major in Mathematics	

Research

Brunnian links of 3-balls in the 4-sphere (with Seungwon Kim and Alison Tatsuoka). arXiv:2603.06554

The Rasmussen s-invariant and exotic 4-manifolds. arXiv:2602.20138

Rational surgery exact triangles in Heegaard Floer homology. arXiv:2601.06654

Khovanov homology can distinguish exotic Mazur manifolds. arXiv:2510.10809

Spectral sequences in unoriented link Floer homology. arXiv:2505.01914

An unoriented skein exact triangle in unoriented link Floer homology. arXiv:2501.01047

Invited Talks	AMS Special Session on Topology, Gauge Theory, and Special Geometric Structures	Mar 2026
	AMS Special Session on Sheaf-Theoretic and Floer-Theoretic Approaches to Contact and Symplectic Topology	Mar 2026
	UC Berkeley, Topology Seminar	Feb 2026
	Joint IAS/Princeton University Symplectic Geometry Seminar	Nov 2025
	London Low Dimensional Topology Seminar (online)	Nov 2025
	Stanford University, Topology Seminar	Oct 2025
	California Institute of Technology, Geometry & Topology Seminar	Oct 2025
	ICTP Conference on Modern Developments in Low-Dimensional Topology	June 2025
	Duke University, Geometry/Topology Seminar	May 2025
	University of Oregon, Topology/Geometry Seminar	Feb 2025

Selected Honors	**Centennial Fellowship, Princeton University**	2023 – 2027
	ILJU Fellowship, ILJU Academy and Culture Foundation	2023 – 2028
	Pure Mathematics Prize, University of Cambridge	2023
	Leslie Walshaw Award, Trinity College	2023
	Ver Heyden de Lancey Prize, Trinity College	2022
	Presidential Science Scholarship, Republic of Korea	2017 – 2023
	2019 – 2021: leave for mandatory national service	

Service	**Princeton University Student Topology Seminar**	Spring 2024 – present

Service

Princeton University Student Topology Seminar Spring 2024 – present
Organizer (Spring 2024, Fall 2024, Spring 2025); Co-organizer (Fall 2025, Spring 2026)

Princeton University Topology Reading Seminar Spring 2024, Fall 2024, Fall 2025
Co-organizer (Spring 2024 Khovanov homology and related topics);
Organizer (Fall 2024 Topics in Heegaard Floer homology, Fall 2025 New constructions of closed 4-manifolds, Spring 2026 Watanabe's disproof of the Smale conjecture)

International Mathematical Olympiad (IMO) 2019, 2022, 2024, 2025
2019: Language Consultant; 2022, 2024, 2025: Coordinator

KAIST Advanced Mathematics Camp 2016
Teaching assistant; Probability and measure theory

Languages **Korean** (native), **English** (fluent), **Mandarin Chinese**, **Japanese** (漢検 準2級)