Dohoon Kim

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College Park, MD 20742

EDUCATION

PhD Candidate in Mathematics, University of Maryland, 2019-Present.

MMath in Mathematics, University of Oxford, 2017-2018.

BA in Mathematics, University of Oxford, 2014-2017.

PUBLICATIONS

A Practical Cryptanalysis of WalnutDSA (with Daniel Hart, Giacomo Micheli, Guillermo Pascual-Perez, Christophe Petit, and Yuxuan Quek).
Lecture Notes in Computer Science, Volume 10769 (2018). [DOI]

TALKS

Degenerations in the moduli spaces of curves and sheaves (5-minute talk). A Panorama of Moduli Spaces, Goethe University Frankfurt am Main, Feb 2024.

Degenerations in Gromov-Witten and Donaldson-Thomas theories (5-minute talk). Algebraic Geometry Northeastern Section, University of Pennsylvania, Oct 2023.

Relative Gromov-Witten invariants and the degeneration formula. Preliminary Oral Examination, University of Maryland, Dec 2022.

The Atiyah-Bott localization formula in enumerative geometry. Graduate Student Conference in Algebra, Geometry, and Topology, Temple University, May 2022.

Equivariant cohomology in algebraic geometry and Steiner's problem. Graduate Student Topology and Geometry Conference, Georgia Institute of Technology, Apr 2022.

Using equivariant cohomology to solve Steiner's problem. Student Algebra-Number Theory Seminar, University of Maryland, Apr 2022.

Using blowups to solve Steiner's conic problem. Student Algebra-Number Theory Seminar, University of Maryland, Mar 2022.

The equivalence of the constructible topology and the ultrafilter topology. Student Algebra-Number Theory Seminar, University of Maryland, Oct 2020.

AWARDS

- Hauptman Summer Fellowship, 2023.
- Dean's Fellowship, University of Maryland, 2019-2021.

Teaching Experience

University of Maryland

- Instructor, Math 120 - Elementary Calculus I (Summer 2024)
- Teaching Assistant, Math 120 - Elementary Calculus I (Spring 2020).
- Teaching Assistant, Math 141 - Calculus II (Fall 2019, Fall 2020).
- Teaching Assistant, Math 240 - Introduction to Linear Algebra (Fall 2021, Spring 2022, Fall 2023, Spring 2024).
- Teaching Assistant, Math 461 - Linear Algebra for Scientists and Engineers (Spring 2023, Fall 2024).
- Grader, Math 405 - Linear Algebra (Spring 2021).
- Grader, Math 410 - Advanced Calculus I (Spring 2021).

Languages

English (fluent); Korean (fluent); Japanese (proficient).

Updated September 4, 2024