CURRICULUM VITAE

MINSEONG KWON

CONTACT INFORMATION

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Research Interests

Complex geometry, Lie theory and algebraic geometry, mainly

- complex contact geometry of nilpotent orbits;
- rational curves on algebraic varieties;
- Luna-Vust theory for spherical varieties.

EMPLOYMENT

Gyeongsang National University, Korea

Sep. 2025

Postdoctoral Researcher

EDUCATION

KAIST, **Korea**Mar. 2019–Aug. 2025

M.S. & Ph.D. Integrated Program in Mathematical Sciences

Supplementary military service as Technical Research Personnel (Mar. 2021–Feb. 2025)

KAIST, Korea Mar. 2014–Feb. 2019

B.S. in Mathematical Sciences

Additional Experiences

Center for Complex Geometry in IBS, Korea

Sep. 2020-Aug. 2025

Student Research Assistant

Tokyo Institute of Technology, Japan

Jul. 2019-Sep. 2019

Exchange student

Last update: August 22, 2025

Technical University of Denmark, Denmark

Exchange student

Feb. 2017-Jun. 2017

TEACHING

KAIST, **Korea**Mar. 2019–Feb. 2024

Teaching Assistant

- Calculus (MAS101, MAS102): Spring 2019, Fall 2020, Spring 2021 (vice-head TA), Spring 2022
- Introduction to Linear Algebra (MAS109): Fall 2019, Fall 2021
- Linear Algebra (MAS212): Fall 2019
- $\bullet\,$ Modern Algebra I (MAS311): Spring 2023
- Introduction to Differential Geometry (MAS321): Fall 2020, Fall 2021, Fall 2023
- Introduction to Algebraic Geometry (MAS411): Fall 2022

PUBLICATIONS

Published

Accepted

Preprints

- (3) Algebraic hyperbolicity of adjoint linear systems on spherical varieties (with Haesong Seo), 2025, submitted.
 arXiv:2508.09414
- (2) Classification of Equivariant Legendrian Embeddings of Rational Homogeneous Spaces into Nilpotent Orbits, 2025, submitted. arXiv:2507.03932
- (1) Spherical Geometry of Hilbert Schemes of Conics in Adjoint Varieties, 2023, submitted. arXiv:2309.13935

Presentations

Conference Talks and Seminars

- (14) Aug. 21–22, 2025: Seminar, Gyeongsang National University, Jinju, Korea
- (13) Aug. 6, 2025: Young Mathematician Workshop on Several Complex Variables 2025, Beijing Normal University, Beijing, China
- (12) Jul. 17, 2025: The 5th Korea-France Conference in Mathematics, Institut de Mathématique de Bordeaux, Bordeaux, France
- (11) Apr. 26, 2025: Special Session of 2025 KMS Spring Meeting, KAIST, Daejeon, Korea

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- (10) Feb. 4, 2025: Workshop on Fano spherical varieties, Yonsei University, Seoul, Korea
- (9) Oct. 26, 2024: Special Session of 2024 KMS Annual Meeting, Sungkyunkwan University, Suwon, Korea
- (8) Sep. 25, 2024: Séminaire Algèbre et Arithmétique, École Polytechnique—-CMLS, Palaiseau, France
- (7) Sep. 17, 2024: Séminaire (Algèbre et Géométries), Institut Fourier, Grenoble, France
- (6) Aug. 6, 2024: Young Mathematician Workshop on Several Complex Variables 2024, Osaka Metropolitan University, Osaka, Japan
- (5) Jul. 4, 2024: KWMS Summer School 1—Complex Geometry and Related Topics, KIAS, Seoul, Korea
- (4) Apr. 15, 2024: Workshop on Geometry of Homogeneous Varieties, IBS Center for Complex Geometry, Daejeon, Korea
- (3) Feb. 15, 2024: Workshop on Fano Spherical Varieties, Gyeongsang National University, Jinju, Korea
- (2) Oct. 27, 2023: Special Session of 2023 KMS Annual Meeting, Seoul National University, Seoul, Korea
- (1) Aug. 7, 2023: Complex Geometry Seminar, IBS Center for Complex Geometry, Daejeon, Korea

Poster Presentations and Speed Talks

- (4) May 23, 2025: Graduate Student Talk at 2nd KIAS Graduate Student Meeting in Pure Mathematics, KIAS, Seoul, Korea
- (3) Jan. 16, 2024: 5-minute Talk at Workshop on Torus Actions in Symplectic and Algebraic Geometry, IBS Center for Complex Geometry, Daejeon, Korea
- (2) Sep. 12, 2023: Poster Session of A Journey through Algebraic and Complex Geometry, Buyeo, Korea
- (1) May 31, 2023: Speed Talk at Exploring Algebraic Geometry & Topology, Yangpyeong, Korea

AWARDS

Best TA Award for Fall 2021, Dept. of Mathematical Sciences in KAIST

Jan. 2022