

# CURRICULUM VITAE

MINSEONG KWON

## CONTACT INFORMATION

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## RESEARCH INTERESTS

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Complex geometry, Lie theory and algebraic geometry, mainly

- complex contact geometry of nilpotent orbits;
- algebraic varieties with large symmetry groups, e.g. spherical varieties;
- rational curves on algebraic varieties.

## EDUCATION

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**KAIST, Korea** Mar. 2019–Aug. 2025 (Expected)  
*M.S. & Ph.D. Integrated Program in Mathematical Sciences*

**KAIST, Korea** Mar. 2014–Feb. 2019  
*B.S. in Mathematical Sciences*

## ADDITIONAL EXPERIENCES

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**Center for Complex Geometry in IBS, Korea** Sep. 2020–Present  
*Student Research Assistant*

**Tokyo Institute of Technology, Japan** July 2019–Sep. 2019  
*Exchange student*

**Technical University of Denmark, Denmark** Feb. 2017–June 2017  
*Exchange student*

## TEACHING

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### 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
- 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

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### Published

### Accepted

### Preprints

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|-----|---|-----------|
| (2) | <i>Isotropy Irreducible Varieties and Contact Geometry of Nilpotent Orbits</i>                  | 2024      |
| (1) | <i>Spherical Geometry of Hilbert Schemes of Conics in Adjoint Varieties</i><br>arXiv:2309.13935 | Submitted |

## PRESENTATIONS

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### Conference Talks and Seminars

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|------|---|---------------|
| (11) | <i>Isotropy Irreducible Varieties and Complex Contact Geometry</i><br><i>KMGS (Graduate Student Seminar)</i> , KAIST, Daejeon, Korea  | Nov. 21, 2024 |
| (10) | <i>Isotropy Irreducible Varieties and Legendre Moduli Spaces</i><br>Special Session of <i>2024 KMS Annual Meeting</i> , Sungkyunkwan University, Suwon, Korea                                     | Oct. 26, 2024 |
| (9)  | <i>Space of Conics on Adjoint Varieties</i><br><i>Séminaire Algèbre et Arithmétique</i> , École Polytechnique — CMLS, Palaiseau, France   | Sep. 25, 2024 |
| (8)  | <i>Isotropy Irreducible Varieties and Complex Contact Geometry</i><br><i>Séminaire (Algèbre et Géométries)</i> , Institut Fourier, Grenoble, France   | Sep. 17, 2024 |
| (7)  | <i>Deformation of Twistor Conics in Homogeneous Fano Contact Manifolds</i><br><i>Young Mathematician Workshop on Several Complex Variables 2024</i> , Osaka Metropolitan University, Osaka, Japan | Aug. 6, 2024  |

- (6) *Spherical Varieties Parametrizing Conics in Adjoint Varieties* July 4, 2024  
*KWMS Summer School 1 — Complex Geometry and Related Topics*, KIAS, Seoul, Korea
- (5) *Spherical Geometry of Hilbert Schemes of Conics in Adjoint Varieties* Apr. 15, 2024  
*Workshop on Geometry of Homogeneous Varieties*, IBS Center for Complex Geometry, Daejeon, Korea
- (4) *Spherical Geometry of Hilbert Schemes of Conics in Adjoint Varieties* Feb. 15, 2024  
*Workshop on Fano Spherical Varieties*, Gyeongsang National University, Jinju, Korea
- (3) *Complex Geometry Arising from Quaternionic Kähler Manifolds* Nov. 2, 2023  
*KMGS (Graduate Student Seminar)*, KAIST, Daejeon, Korea
- (2) *Spherical Geometry of Hilbert Schemes of Conics in Adjoint Varieties* Oct. 27, 2023  
Special Session of *2023 KMS Annual Meeting*, Seoul National University, Seoul, Korea
- (1) *Spherical Geometry of Hilbert Schemes of Conics in Adjoint Varieties* Aug. 7, 2023  
*Complex Geometry Seminar*, IBS Center for Complex Geometry, Daejeon, Korea

### Poster Presentations and Speed Talks

- (3) *Spherical Geometry of Hilbert Schemes of Conics in Adjoint Varieties* Jan. 16, 2024  
5-minute Talk at *Workshop on Torus Actions in Symplectic and Algebraic Geometry*, IBS Center for Complex Geometry, Daejeon, Korea
- (2) *Spherical Geometry of Spaces of Conics in Adjoint Varieties* Sep. 12, 2023  
Poster Session of *A Journey through Algebraic and Complex Geometry*, Buyeo, Korea
- (1) *Rational Curves in Adjoint Varieties* May 31, 2023  
Speed Talk at *Exploring Algebraic Geometry & Topology*, Yangpyeong, Korea

### AWARDS

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

Jan. 2022