

Seung uk Jang

Contact Details

Address Department of Mathematics, The University of Chicago; 5734 S University Ave,
Chicago, IL, 60637, USA

e-Mail seungukj@uchicago.edu

Education

2014–present **Ph.D student of Math**, *University of Chicago*, Chicago, IL, *USA*.

Mathematics

Advisor: Simion Filip; Alex Eskin

2021 **Master of Science**, *University of Chicago*, Chicago, IL, *USA*.

Mathematics

2013–2014 **Master of Science**, *KAIST*, Daejeon, *South Korea*.

Mathematical Sciences

2009–2013 **Bachelor of Science**, *KAIST*, Daejeon, *South Korea*.

Mathematical Sciences, with minor on Computer Science, and Honor program

Summa cum Laude, 4.25/4.3 in GPA

Valedictorian for graduate ceremony

2006–2009 **High School**, *Korea Science Academy of KAIST*, Busan, *South Korea*.

Publications

2021 **Kummer Rigidity for Hyperkähler Automorphisms**, *Seung uk Jang*.

available as a preprint in arXiv:2109.06722

2017 **Quantum unique ergodicity and the number of nodal domains of eigenfunc-**
tions, *Seung uk Jang, Junehyuk Jung*.

Electronically published in J. Amer. Math. Soc., 2017. 06. 02.,

<http://dx.doi.org/10.1090/jams/883>

Academic Talks

2022 **Kummer Rigidity for Hyperbolic Hyperkähler Automorphisms**, *BiSTRO mini*
conference.

2022 **Currents and Plurisubharmonic Potentials**, *IUPUI*.

Presented in learning talks of 2022 Several Complex Dynamics School

2022 **Discovering a nontriviality of the δ - ϵ definition, in a math way**, *University of*
Chicago.

UChicago Pedagogy Seminar, Dept. of Math

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- 2021 **Kummer Rigidity for Hyperbolic Hyperkaehler Automorphisms**, *University of Chicago*.
UChicago Dynamics Seminar
- 2019 **A Mechanical model for Lorenz System**, *KIAS*.
introductory material for the Lorenz system and its analysis
- 2015 **Quantum ergodicity and the number of nodal domains of eigenfunctions**, *SNU*.
work done with Junehyuk Jung
- 2009 **Lattice Edge Number of Figure Eight Knot**, *2009 KMS-AMS Joint Meeting*, poster session.
work done with Hun Kim, Gyo Taek Jin, Choon Bae Jeon, Sang Hyuk Moon, Sang Hyun Park, Yoo Shin Song
- 2007 **Generalizing 2D Geometric Properties to 3D With the Aid of DGS**, *ATCM 2007*, contributed talks.
work done with Dohyun KIM, Hyobin LEE, Youngdae KIM

Experience

Teaching

Fall 2019 – **Lecturer**, *University of Chicago*, Chicago.

Fall 2022 Graduate Student Lecturer for various courses, in:

- Frechman Calculus course (Math 151-153): Fall 2019 – Spring 2020, Fall 2020 – Winter 2021 (Remote), Fall 2021 – Winter 2022
- Linear algebra (Math 196): Fall 2022
- *Mathematical Methods for Social Sciences* (Math 195): Spring 2021

Other Employments

Fall 2016 – **Researcher**, *NIMS*, Daejeon.

Summer 2019 (Division) Center for Applications of Mathematical Principles

Employment as an Alternative military service for Korea

Working on public understanding of (industrial) mathematics in Korea, including

- public lectures, generally towards 7th-12th grades students,
- running and maintaining IMAGINARY exhibitions in Korea, and
- exploring and developing new items in mathematics that can appeal to general public.

College Fellows

Spring 2016 **Basic Theory of Partial Differential Equations**, *Dr. Will Feldman*, U of Chicago.

Winter 2016 **Basic Theory of Ordinary Differential Equations**, *Prof. Amie Wilkinson*, U of Chicago.

Fall 2015 **Complex Analysis**, *Prof. Amie Wilkinson*, U of Chicago.

Grader

Spring 2014 **Real Analysis**, *Prof. Ji Oon Lee*, KAIST.

Fall 2012 **Functional Analysis**, *Prof. Ji Oon Lee*, KAIST.

Seminar Organizer

2010 **Undergraduate Math Colloquium**, *KAIST*.

Honors and Awards

- 2014–2022 **Doctorial Study Abroad Program.**
Korea Foundation for Advanced Studies
- 2013–2014 **Kwanjeong Scholarship for Korean Graduate Students.**
Scholarship program for graduate students in Korea
- 2011 **Dean's list.**
College of Natural Science, KAIST
- 2009–2012 **Korea Student Aid Foundation, Presidential Scholarship.**
Scholarship program for undergraduate students in Korea