# Seung uk Jang

#### Contact Details

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# Education

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

Mathematics

Advisor: 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

2021 Kummer Rigidity for Hyperbolic Hyperkaehler Automorphisms, *University of Chicago*.

UChicago Dynamics Seminar

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2019 A Mechanical model for Lorenz System, KIAS.

introductary material for the Lorenz system and its analysis

2015 Quantum ergodicity and the number of nodal domains of eigenfunctions, *SNII* 

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.

Winter 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
- o 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

- o public lectures, generally towards 7th-12th grades students,
- o running and maintaining IMAGINARY exhibitions in Korea, and
- o 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

2012–2013 Guerrilla Seminar, KAIST.

First year graduate students' math seminar series Founding member

2010 Undergraduate Math Colloquium, KAIST.

Honors and Awards

# 2014–present 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, Presidental Scholarship. Scholarship program for undergraduate students in Korea