

CV

Personal Information

- Name: Sunghan Kim
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- Work Address: Rm Å74110, Ångströmlaboratoriet, Lägerhyddsvägen 1
- Date of Birth: Feb 5, 1990

Research interests

- Analysis of PDEs
- Free boundary problems
- Regularity theory
- Degenerate/singular parabolic PDEs
- Homogenization problems

Employment

- Uppsala University (Sweden) Assistant Professor Nov 2025 – Present
- Uppsala University (Sweden) Postdoc Jan 2022 – Oct 2025
- KTH Royal Institute of Technology (Sweden) Postdoc Jan 2020 – Dec 2021

Education

- Ph.D. in Mathematics Mar 2013 – Feb 2019
Seoul National University (South Korea)
Advisor: Ki-Ahm Lee
- B.Sc. in Mathematics Completed, Feb 2013
Seoul National University (South Korea)

Awards and grants

- Göran Gustafsson Prize for Young Researchers: 2025-2026, Principal Investigator, 1.25m SEK
- VR Starting Grant (Sweden): 2024-04747 2025-2029, Principal Investigator, 4.4m SEK
- NRF Grant (Korea): NRF-2014H1A8A1021602 2014-2019, Principal Investigator, approx. 2.2m SEK
- Ph.D. Dissertation Award, the Korean Mathematical Society
- Best Ph.D. Dissertation Award, the College of Natural Sciences, Seoul National University

Invited talks

- Workshop “Regularity of Free Boundary Problems” of the Thematic Programme on “Free Boundary Problems”, ESI, Austria, Sep 2025
- Workshop “Regularity Theory for Free Boundary and Geometric Variational Problems V”, Rimini, Italy, June 2025
- Seminar “Analysis and PDE”, NUS, Singapore, Mar 2025
- Workshop “Stockholm Analysis Seminar”, Stockholm University, Sweden, Mar 2025
- Workshop “Calculus of Variations”, MFO (Oberwolfach), Germany, Aug 2024
- Workshop on Nonlinear Parabolic PDEs, Institut Mittag-Leffler, May 2024
- PDE Seminar, KTH, Sweden, Mar 2024
- 2023 Workshop on Elliptic & Parabolic PDEs and Related Topics, Jeju, Korea, Dec 2023
- PDE Seminar, HKUST, Hongkong, Sep 2023
- PDE and applications, Uppsala University, Sweden, Jan 2023
- APP Seminar, KIAS, Korea, Nov 2022
- Precolloquium Talk, SMC, Sweden, Nov 2022
- Geometric Aspects of Nonlinear Partial Differential Equations, Institut Mittag-Leffler, Sweden, Oct 2022
- Special session on Nonlinear PDEs in “28th Nordic Congress of Mathematicians”, Alto University, Finland, Aug 2022
- Asia-Pacific Analysis and PDE seminar, The University of Sydney, Australia, Mar 2022
- PDE and applications, Uppsala University, Sweden, Jan 2022
- Mini-symposium on Regularity of Free boundaries in “15th International Conference on Free Boundary Problems: Theory and Applications”, held online, Sep 2021
- PDE and Applications, Uppsala University, Sweden, Oct 2020
- Mini-symposium on Regularity of Free boundaries in “14th International Conference on Free Boundary Problems”, Shanghai Jiao Tong University, China, Jul 2017
- 13th International Workshop on Differential Equations, Chonnam National University, Korea, May 2017
- Workshop on Nonlinear Elliptic and Parabolic Equations, Seoul National University, Korea, Dec 2016
- 12th International Workshop on Differential Equations, Chonnam National University, Korea, May 2015
- Homogenization and Random Phenomenon, Institut Mittag-Leffler, Sweden, Nov 2014.

Academic visits

- Institut Mittag-Leffler, Sweden, Aug – Dec 2022
- KTH, Sweden, Host: H. Shahgholian, Jan & Jul 2018
- University of Nottingham Ningbo, China, Aug 2017
- University of Augsburg, Germany, Feb 2016
- KTH, Sweden, Host: H. Shahgholian, Feb & Sep 2016
- KTH, Sweden, Host: H. Shahgholian, Jan & Aug 2015
- Institut Mittag-Leffler, Sweden, Aug – Dec 2014

Organized workshops

- Organizer, workshop "PDEs and Applications" at Uppsala University, 2025 – present

Supervision of students

- Co-advisor of Rada Ziganshina (KTH, main advisor: Henrik Shahgholian) 2024 – present

Teaching

At Uppsala University:

- TA for Linear Algebra II, Fall 2025
- TA for Multivariable Calculus, Spring 2025
- Lecturer for Multivariable Calculus for Data Analysis, Fall 2023

At KTH Royal Institute of Technology:

- Lecturer for Basic Course in Mathematics, Fall 2021
- TA for Partial Differential Equations on Graduate Level, Fall 2021
- Lecturer for Calculus in Several Variables, Fall 2020

At Seoul National University:

- TA for Multivariate Calculus, Spr 2018
- TA for Ordinary Differential Equations, Fall 2018
- TA for Calculus, 2014 – 2018
- TA for Calculus in Biology, 2013

Last updated: November 19, 2025