

Minsung Kim

CONTACT INFORMATION	Centro di Ricerca Matematica Ennio De Giorgi Scuola Normale Superiore Piazza dei Cavalieri, 3 Pisa PI 56100, Italy	minsung.kim@sns.it
RESEARCH INTERESTS	Smooth ergodic theory / Parabolic dynamics and its connections with probability, geometry and representation theory / Random walks and its applications.	
ACADEMIC APPOINTMENT	Scuola Normale Superiore, Pisa, Italy. <ul style="list-style-type: none">• Junior visitor in Centro Ennio De Giorgi. Oct. 2022 - present. (Mentor: Professor. Stefano Marmi.) Nicolaus Copernicus University, Toruń, Poland. <ul style="list-style-type: none">• Research associate. Jan. 2021 - Sep. 2022. (Mentor: Professor. Krzysztof Frączek.)	
EDUCATION	Ph.D. Mathematics, University of Maryland - College Park. Dec. 2020 <ul style="list-style-type: none">• Advisor: Professor. Giovanni Forni.• Visiting doctorant, Institut de Mathematiques de Jussieu - Paris Rive Gauche. Oct 2017 - Août 2018, Jan 2019 - Juin 2019. M.S. Mathematics, North Carolina State University. May 2013 (Advisor: Professor. Robert H. Martin, Jr.) B.S. Mathematics education, Pusan National University. Aug 2011 (Advisor: Professor. Jae Keol Park.)	
PUBLICATIONS AND PREPRINTS	<ol style="list-style-type: none">1. Limit theorem for higher rank action on Heisenberg manifolds. <i>Discrete and Continuous Dynamical Systems, Vol. 42, No. 9, September 2022</i>2. Effective equidistribution for generalized higher step nilflows. <i>Ergodic Theory and Dynamical Systems, 42(12), 3656-3715, December 2022</i>3. New phenomena for deviation of Birkhoff integrals for locally Hamiltonian flows. (with Krzysztof Frączek) arXiv:2112.130304. Solving the cohomological equation for locally Hamiltonian flows, part I - local obstructions. (with Krzysztof Frączek) arXiv:2305.168845. Solving the cohomological equation for locally Hamiltonian flows, part II - global obstructions. (with Krzysztof Frączek) arXiv:2306.023406. Anisotropic spaces and automorphisms of nilmanifolds. (with Oliver Butterley) arXiv:2308.06630	
SEMINAR AND CONFERENCE TALKS	Mini-workshop on <i>group actions and rigidity theory</i> , Nankai University Conference, <i>Regular and Stochastic Behaviour in Dynamical Systems</i> , CRM Short talk in conference, <i>Anosov Dynamics</i> , CIRM, Luminy, France Geometry seminar, IBS-Center for Geometry and Physics, Pohang, Korea	Oct 2023 June 2023 Apr 2023 Jan 2023

Ergodic theory seminar, Nicolaus Copernicus University, Toruń, Poland	Dec 2022
Special seminar for new junior visitors, Scuola Normale Superiore, Pisa	Nov 2022
Zoominar in Dynamical Systems at Porto, Portugal	June 2022
Ergodic theory and Dynamical systems, POSTECH, Pohang, Korea	May 2022
Dynamics seminar, Centro De Giorgi(Sculola Normale Superiore), Pisa	Apr 2022
Dynamics seminar, IMPAN(Polish Academy of Sciences), Warsaw, Poland	Mar 2022
Probability seminar, IMPAN(Polish Academy of Sciences), Sopot, Poland	Nov 2021
Analysis seminar, Saitama University, Saitama, Japan	Oct 2021
Ergodic theory and Dynamical systems, POSTECH, Pohang, Korea	Sep 2021
Seminar in Ergodic theory and Dynamical systems, KIAS, Seoul, Korea	Aug 2021
Ergodic theory and Dynamical systems, Nicolaus Copernicus University	Mar 2021
(2 talks) Toruń, Poland	Feb 2021
Workshop in Dynamical Systems and Related Topics, Penn State University	Sep 2019

TEACHING EXPERIENCE

Teaching Assistant. UMCP.

- Sole Contact Instructor
 - *Introduction to Probability (MATH 111)* Spring 2014
- Discussion Leader
 - *Calculus II (MATH 141)* Fall 2014, Spring 2015
 - *Differential Equations for Scientists and Engineers (MATH 246)* Sp 2016,20
 - *Calculus for Life Sciences II (MATH 131)* Spring 2017
 - *Calculus III (MATH 241)* Fall 2018, 2019, 2020
- Grader
 - Advanced Calculus 1,2 (MATH 410, 411), Introduction to Dynamics and Chaos (MATH 452), Introduction to Topology (MATH 432), Differential Forms and Their Applications (MATH 437), Real Analysis I* (MATH 630), Dynamical systems I* (MATH 642), Differential Geometry* (MATH 740)* * for grad course.
- Directed Reading Program Mentor
 - Rebecca Hsu, Riemann mapping Theorem.* Summer 2014

Lecture Assistant. NCSU.

- Instructor
 - *Contemporary Mathematics (MA 103)* Summer II 2012
- Grader
 - *Introduction to Finite Mathematics with Applications (MA 114)* Spring 2013
 - *Calculus for Life and Management Sciences (MA 231)* Fall 2012

EXPERIENCE

Organizer, seminari di Sistemi Dinamici, Scuola Normale Superiore - Uni.Pisa 2023
 Student Dynamics Seminar Organizer, University of Maryland Fall 2015 - Fall 2016
 University of Hawaii at Hilo, Exchange student, Mathematics. Fall 2009 - Spring 2010
 Republic of Korea Army, completion of military service July 2006 - July 2008

LANGUAGE

Korean (native), English (fluent), French, Italian (elementary), Polish (beginner)