

## Minsung Kim

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CONTACT INFORMATION	Faculty of Mathematics and Computer Science Nicolaus Copernicus University  ul. Chopina 12/18, 87-100 Toruń, Poland	<b>mkim16@mat.umk.pl</b>
RESEARCH INTERESTS	Smooth ergodic theory / Parabolic dynamics and its connections with number theory, geometry and representation theory / Random walks and its applications.	
ACADEMIC APPOINTMENT	<b>Nicolaus Copernicus University, Toruń, Poland</b> <ul style="list-style-type: none"><li>• Research associate. Jan. 2021 - Sep. 2022 (Mentor : Professor. Krzysztof Frączek.)</li></ul>	
EDUCATION	<b>University of Maryland - College Park</b> <ul style="list-style-type: none"><li>• Ph.D. Mathematics. Dec. 2020 (Advisor : Professor. Giovanni Forni.)</li></ul> 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	1. Effective equidistribution for generalized higher step nilflows. <i>Ergodic Theory and Dynamical Systems</i> , p.1-60, 2021, DOI: 10.1017/etds.2021.110  2. Limit theorem for higher rank action on Heisenberg manifolds. <i>Accepted in Discrete and Continuous Dynamical Systems</i> arXiv:2007.03803  3. New phenomena for deviation of Birkhoff integrals for locally Hamiltonian flows. (with Krzysztof Frączek) arXiv:2112.13030	
TALKS	Ergodic theory and Dynamical systems, POSTECH, Pohang, Korea May 2022 Dynamics seminar, Centro De Giorgi(Sculola Normale Superiore), Pisa, Italy 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	
AWARDS AND GRANTS	Grant for experienced researchers from abroad, Nicolaus Copernicus University. Excellence Center 'Dynamics, Analysis and Artificial Intelligence'. 2021	

SELECTIVE CONFERENCE ATTENDED	First Dynamical Systems Summer Meeting, Będlewo, Poland	Aug 2021
	Spring School on Transfer Operators (Classical and Modern Techniques)	Mar 2021
	EPFL. (Online)	
	Workshop on Dynamical Systems and Related Topics, Penn State University. (Online)	Oct 2020
	Workshop on Dynamical Systems and Related Topics, Penn State University.	Sep 2019
	Workshop on Dynamics of Parabolic Flows, University of Zurich.	July 2019
	Anisotropic Spaces and their Applications to Hyperbolic and Parabolic Systems, Oberwolfach.	June 2019
TEACHING EXPERIENCE	<b>Teaching Assistant.</b> UMCP.	
	• Sole Contact Instructor	
	- <i>Introduction to Probability (MATH 111)</i>	Spring 2014
	• Discussion Leader	
	- <i>Calculus II (MATH 141)</i>	Fall 2014, Spring 2015
	- <i>Differential Equations for Scientists and Engineers (MATH 246)</i>	Sp 2016, 20
	- <i>Calculus for Life Sciences II (MATH 131)</i>	Spring 2017
	- <i>Calculus III (MATH 241)</i>	Fall 2018, 2019, 2020
	• Grader	
	<i>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)</i> * for grad course.	
	• Directed Reading Program Mentor	
	<i>Rebecca Hsu, Riemann mapping Theorem.</i>	Summer 2014
	<b>Lecture Assistant.</b> NCSU.	
	• Instructor	
	- <i>Contemporary Mathematics (MA 103)</i>	Summer II 2012
	• Grader	
	- <i>Introduction to Finite Mathematics with Applications (MA 114)</i>	Spring 2013
	- <i>Calculus for Life and Management Sciences (MA 231)</i>	Fall 2012
LONG-TERM VISITS	Visiting doctorant, Institut de Mathematiques de Jussieu-Paris Rive Gauche Oct 2017 - Août 2018, Jan 2019 - Juin 2019	
EXPERIENCE	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	
LANGULAGE	Korean (native), English (fluent), French (elementary), Polish (beginner)	