## Minsung Kim

Awards and Grants

Contact Information	Faculty of Mathematics and Computer Science Nicolaus Copernicus University	
	ul. Chopina 12/18, 87-100 mkim16@ Toruń, Poland	mat.umk.pl
RESEARCH INTERESTS	Smooth ergodic theory / Parabolic dynamics and its connections with number theory, geometry and representation theory / Random walks and its applications.	
ACADEMIC	Nicolaus Copernicus University, Toruń, Poland	
Appointment	• Research associate. Jan. 2021 - Sep. 2022 (Mentor : Professor. Krzysztof Frączek.)	
EDUCATION	ATION University of Maryland - College Park	
	• Ph.D. Mathematics. Dec. 2020 (Advisor : Professor. Giovanni Forni.)	
	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. Ergodic Theory and Dynamical Systems, p.1-60, 2021, DOI: 10.1017/etds.2021.110	
	2. Limit theorem for higher rank action on Heisenberg manifolds. ${\rm arXiv:}2007.03803$	
	3. New phenomena for deviation of Birkhoff integrals for locally Hamiltonian flows. (with Krzysztof Frączek) arXiv:2112.1303	
TALKS	Ergodic theory and Dynamical systems, POSTECH, Pohang, Korea Dynamics seminar, Centro De Giorgi(Sculola Normale Superiore), Pisa, Italy Dynamics seminar, IMPAN(Polish Academy of Sciences), Warsaw, Poland	May 2022 y Apr 2022 Mar 2022
	Probability seminar, IMPAN(Polish Academy of Sciences), Sopot, Poland Analysis seminar, Saitama University, Saitama, Japan Ergodic theory and Dynamical systems, POSTECH, Pohang, Korea Seminar in Ergodic theory and Dynamical systems, KIAS, Seoul, Korea Ergodic theory and Dynamical systems, Nicolaus Copernicus University (2 talks) Toruń, Poland	Nov 2021 Oct 2021 Sep 2021 Aug 2021 Mar 2021 Feb 2021
	Workshop in Dynamical Systems and Related Topics, Penn State University	Sep 2019

Grant for experienced researchers from abroad, Nicolaus Copernicus University. Excel-

2021

lence Center 'Dynamics, Analysis and Artificial Intelligence'.

SELECTIVE CONFERENCE ATTENDED First Dynamical Systems Summer Meeting, Będlewo, Poland Spring School on Transfer Operators (Classical and Modern Techniques) EPFL. (Online)

Aug 2021

Mar 2021

Workshop on Dynamical Systems and Related Topics,

Oct 2020

Penn State University. (Online)

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

## 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

Fall 2012

- Grader
  - Introduction to Finite Mathematics with Applications (MA 114) Spring 2013
  - Calculus for Life and Management Sciences (MA 231)

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 (na

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