

Maxim Sølund Kirsebom

[alt. sp.: Maxim Solund Kirsebom, Maxim Soelund Kirsebom]

Curriculum vitae

Department of Mathematics
University of Bremen
Bibliothekstraße 1
28359 Bremen, Germany

E-mail: kirsebom@math.uni-bremen.de
Office: MZH 4140
URL: <http://www.math.uni-bremen.de/~kirsebom>
Cell phone: +49 (0)421 218 63649

Danish citizen, born in Norway.

Education & Academic Degrees

PhD in Mathematics, University of Bristol, UK, finished 06/2014.
Supervisor: Prof. Dr. Alexander Gorodnik.
Thesis title: *Extreme value theory for group actions on homogeneous spaces*.
137 pages, ungraded.

MSc in Mathematics, Aarhus University, Denmark, finished 09/2010.
Supervisor: Dr. Simon Kristensen
Thesis title: *The Set of Exceptions to Littlewood's Conjecture*.
93 pages, grade 12.

BSc in Mathematics, Aarhus University, Denmark, finished 12/2008.
Supervisor: Dr. Simon Kristensen
Thesis title: *Zeros of Polynomials with Restricted Coefficients*.
53 pages, grade 12.

Academic appointments

Postdoctoral Researcher, 09/2014–Present.
University of Bremen, Germany.

Research Interests

Dynamical Systems, Random Walks, Ergodic Theory, Number Theory, Extreme Value Theory, Diophantine Approximation.

Publications

- [1] M. Kirsebom, Extreme value theory for random walks on homogeneous spaces.
Discrete and Continuous Dynamical Systems - Series A, **34** (2014), 4689 - 4717.
- [2] M. Kirsebom, Extreme value distributions for one-parameter actions on homogeneous spaces.
Preprint, arXiv:1503.09191, submitted, 2015.

Research Grants

DFG & Marie Curie Foundation, 01.2016-12.2017, DKK 1.573.449 (~ €211.669)
Postdoc research grant.
Project title: Extremes in Homogeneous Dynamics with Number Theoretic Perspectives.

Supervision & Mentoring

Ph.D. Students:

Wafa Ben Saad, 2016-present (joint with Prof. Dr. Marc Keßeböhmer)

Mentoring:

Joakim Færgemann, 2016, 3rd year high school student.

Mentoring his project in the "Forskingspirer" ("Aspiring Researcher") competition.

Project title: "Largest collection of cards in the game SET without a valid set".

Invited talks and lectures

Homogeneous dynamics -and its applications to number theory, 05/2017.

One-day workshop.

Seoul National University, Republic of Korea.

Mini-course: Extreme Value Theory in Dynamical Systems, 05/2017.

2 x 90 min lectures. On invitation by Professor Seonhee Lim.

Seoul National University, Republic of Korea.

Dynamical Systems and Geometry Seminar, 02/2017.

University of Bremen, Germany.

Dynamical Systems and Geometry Seminar, 02/2017.

University of Bremen, Germany.

Dynamical Systems and Geometry Seminar, 11/2014.

University of Bremen, Germany.

Dynamical Systems and Geometry Seminar, 05/2014.

University of Bremen, Germany.

Analysis Seminar, 08/2013.

Aarhus University, Denmark.

Ergodic Theory and Dynamical Systems Seminar, 05/2013.

University of Bristol, UK.

Pure Postgraduate Seminar, 10/2012.

University of Bristol, UK.

YRM conference, 04/2012.

University of Bristol, UK.

"Friends of Euler" - Student Organised Seminar, 12/2008.

Aarhus University, Denmark.

Events organised

Dynamics, Chaos and Applications, 03/2016.

4th Bremen Winter School and Symposium.

Main Organiser (with Marc Keßeböhmer, Jens Rademacher and Ivan Ovsyannikov).

University of Bremen, Germany

Teaching

Measure and Probability Theory 2 (Mass- und Wahrscheinlichkeitstheorie 2), 2015.

B.Sc/M.Sc.-level lecture course, 4h lectures + 2h tutorial per week. In German.

University of Bremen, Germany.

Joint with Prof. Dr. M. Kesseböhmer.

Analysis 1, 2014-2015.

First year analysis course, tutorial instructor, 2h per week + grading homeworks. In German.

University of Bremen, Germany.

Analysis and Calculus, 2011-2012

First year analysis course, tutorial instructor, 2h per week + grading homeworks. In English.

University of Bristol, UK.

Dynamical Systems & Ergodic Theory + Algebraic Number Theory, 2010-2012

3rd/4th years course, grading homeworks.

University of Bristol, UK.

Outreach activities

"Nature in the Tent" ("Natur i Teltet"), 2007-2008.

Science outreach for general public.

Developing teaching materials, interacting with interested members of the public. In Danish.

Aarhus University, Denmark.

Conferences, Workshops and Schools attended

Random walks on algebraic structures, 06/2017.

Conference - In honour of Yves Guivarc'h.

Universite de Rennes 1, France.

Homogeneous dynamics -and its applications to number theory, 05/2017.

One-day workshop.

Seoul National University, Republic of Korea.

Distinguished Lectures in Dynamics, 04/2017.

Lecture Series.

TIFR, Mumbai, India.

Homogeneous Spaces, Diophantine Approximation and Stationary Measures, 02/2017.

CNRS Research School.

CIRM, Marseille, France.

Ergodic Theory and its Connections with Arithmetic and Combinatorics, 12/2016.

Jean Morlet Chair Conference.

CIRM, Marseille, France.

Diophantine Approximation, Fractal Geometry and Dynamics, 10/2016.

Arbeitsgemeinschaft/Working group.

Mathematisches Forschungsinstitut Oberwolfach, Germany.

School on Algebraic, Geometric

- and Probabilistic Aspect of Dynamical Systems and Control Theory , 07/2016.

Summer school.

ICTP Trieste, Italy.

Dynamics, Geometry and Number Theory, 06/2016.

A conference in honor of Gregory Margulis' 70th birthday.

Institut Henri Poincare (Paris), France.

Dynamics, Chaos and Applications, 03/2016.

4th Bremen winter school and symposium.

University of Bremen, Germany.

Diffusion on Fractals and Non-linear Dynamics, 03/2015.

3rd Bremen winter school and symposium.

University of Bremen, Germany.

Extreme Value Theory and Laws of Rare Events, 07/2014.

Workshop/conference.

CIRM, Marseille, France

Groups, Numbers, and Dynamics, 06/2014.

Workshop/conference.

University of Cambridge, UK.

Non-equilibrium Statistical Mechanics

- and the Theory of Extreme Events in Earth Science, 10/2013.

Workshop/conference.

University of Cambridge, UK.

Homogeneous Dynamics, Unipotent Flows and Applications, 10/2013.

Conference in honor of Marina Ratner and her work.

The Hebrew University of Jerusalem, Israel.

Geometrie et Dynamique, 09/2013.

Workshop/conference.

University of Bordeaux, France.

Advances in Number Theory and Dynamical Systems, 04/2013.

Workshop/conference.

University of Bristol, UK.

Equidistribution in Number Theory and Dynamics, 03/2013.

Workshop/conference.

ETH Zürich, Switzerland.

Statistical Mechanics and Extreme Events in Earth Sciences, 01/2013.

Workshop/conference.

University of Reading, UK.

Flows on Homogeneous Spaces, Summer School, 09/2012.

Summer school.

Technion, Haifa, Israel.

Ergodic Theory & Dynamical Systems: Perspectives & Prospects, 04/2012.

Workshop/conference.

University of Warwick, UK.

Young Researchers in Mathematics, 04/2012.

Workshop/conference.

University of Bristol, UK.

Modern Dynamics

- and its Interaction with Analysis, Geometry and Number Theory, 07/2011.

Summer school and conference.

Bedlewo, Poland.

Ergodic Theory and Number Theory, 04/2011.

Workshop/conference.

University of Warwick, UK.

Group Actions in Number Theory, 01/2011.

Winter school.

EPFL, Switzerland.

Danish Mathematical Society, 08/2008.

Summer school.

Aalborg University, Denmark.

Administrative Responsibilities

Secretary of "Friends of Euler", 2007-2009.

A student organization arranging talks, events and excursions.

Department of Mathematics, Aarhus University, Denmark.

"Natur i Teltet", 2007-2009

A science outreach for primary/high school.

Responsible for organizing and creating content for the mathematics part.

Department of Mathematics, Aarhus University, Denmark.

Committee for the Allocation of Student Offices, 2007-2009.

Member of committee, responsible for allocation of math students.

Department of Mathematics, Aarhus University, Denmark.

Editor in Chief of "Mads Føk", 2006-2009.

The faculty student paper.

Faculty of Natural Sciences, Aarhus University, Denmark.

Programming skills

Latex: Advanced.

Python: Basic.

C++: Basic.

MATLAB: Basic.

Java: Basic

Language skills

Danish: Mother tongue.

English: Fluent.

German: Fluent.

Italian: Conversational.