CURRICULUM VITAE FOR CHRISTIAN ROSENDAL

Professional address: Department of Mathematics, Statistics, and Computer Science (M/C 249), University of Illinois at Chicago, 851 S. Morgan St., Chicago, IL 60607-7045

Phone: 773 537 5184

Email address: rosendal.math@gmail.com

Personal web page: homepages.math.uic.edu/∼rosendal

EMPLOYMENT HISTORY:

- Visiting Professor, University of Maryland, College Park, August 2016–August 2018.
- Professor, University of Illinois at Chicago, since August 2014.
- Associate professor, University of Illinois at Chicago, August 2010–August 2014.
- Assistant professor, University of Illinois at Chicago, August 2008–August 2010.
- Assistant professor (tenure track), University of Illinois at Urbana-Champaign, August 2005–August 2008.
- Harry Bateman instructor, Caltech, October 2003–August 2005.

DIPLOMAS OBTAINED:

- Doctorate of Mathematics of the University of Paris, Pierre et Marie Curie (June 2003) under the direction of Alain Louveau, CNRS.
- Cand. Scient. (Master) of Mathematics at the University of Oslo (February 2002).
- Diplôme d'Études Approfondies (Master) of Mathematical Logic at the University of Paris, Dennis Diderot (July 2000).

STUDIES:

- 2000-2003: Doctoral studies in the Equipe d'Analyse Fonctionnelle at the University of Paris, Pierre et Marie Curie, France.
- 1999-2000: Diplôme d'Études Approfondies in Logic and the foundations of computer science at the University of Paris, Dennis Diderot, France.
- 1996-1999: Undergraduate studies of Philosophy and Mathematics at the University of Oslo, Norway.
- 1994-1996: Undergraduate studies of Philosophy and Mathematics at the University of Copenhagen, Denmark.

SHORTER VISITING APPOINTMENTS:

- Visiting professor, Universidade de São Paulo, Brazil, November 2012, invited by Prof. V. Ferenczi and Fundação de Amporo à Pesquisa do Estado de São Paulo (FAPESP).
- Visiting professor, Universidade de São Paulo, Brazil, May-June 2009, invited by Prof. V. Ferenczi and Fundação de Amporo à Pesquisa do Estado de São Paulo (FAPESP).
- Visiting professor, Universidade de São Paulo, Brazil, May-June 2007, invited by Prof. E. M. Galego and Fundação de Amporo à Pesquisa do Estado de São Paulo (FAPESP).
- Visiting graduate student at The Fields Institute of the Mathematical Sciences, Toronto, Canada. Three months stay during the thematic year on Set theory and Analysis, autumn 2002.

FELLOWSHIPS:

- Simons Foundation Fellowship #229959 (*Applications of descriptive set theory to functional analysis*), 2012-13. $86,131.

GRANTS:

- co-PI on NSF Grant DMS 1613386 (*Prague Topology Symposium*, conference grant), March 2016. $30,000.
- PI on NSF Grant DMS 1464974 (*Large scale geometry of Polish groups*, individual research grant), June 1st, 2015 – May 31st, 2018. $299,820
- PI on NSF Grant DMS 1201295 (*Descriptive set theory and its relations with functional and harmonic analysis*, individual research grant), May 15th, 2012 – April 30th, 2015. $317,552.
- PI on NSF Grant DMS 0901405 (*Applications of descriptive set theory to functional analysis and topological dynamics*, individual research grant), June 1, 2009 – May 31, 2012. $212,861.
- PI on NSF Grant DMS 0556368 (*The set theory of Polish groups*, individual research grant), May 15th, 2006 – April 30th, 2009. $121,227.

SCHOLARSHIPS:

- Scholarship of the Fields Institute of the Mathematical Sciences (2002).
- Knud Højgaard's Foundation (2001).
- The Oticon Foundation, twice, (2001) and (2002).
- Scholarship of the University of Oslo (1998).

LANGUAGES:

- Danish, English, French.

DOCTORAL THESIS:

"Étude descriptive de l'isomorphisme dans la classe des espaces de Banach" ("A descriptive study of the isomorphism relation in the class of Banach spaces"). Thesis defended in June 2003, Institute of Mathematics, Paris Centre.

MINI-COURSES:

- *Descriptive set theory and model theory* (4 lectures in collaboration with P. Wesolek), Thematic Program on Model Theory, Center for Mathematics at Notre Dame, June 2016.
- *Coarse geometry of topological groups* (3 lectures), Polish groups and geometry, Paris, France, June 2016.
- *General theory of Polish groups* (2 lectures), School on Polish groups, Midreshet Sde-Boker, Israel, May 2016.
- *Large scale geometry of automorphism groups* (3 lectures), LMS – EPSRC Durham Symposium, Permutation groups and Transformation Semigroups, Durham, UK, July 2015.
- *On isometry groups and maximal symmetry* (3 lectures), Encontro National de Análise Matemática et Aplicações, Universidade Federal de Sergipe, Brazil, November 2012.
- *Isometry groups of separable reflexive spaces and the existence of maximal norms* (3 lectures), 39th Winter School in Abstract Analysis, Czech republic, January 2011.
- *Ramsey theoretic techniques in the geometry of Banach spaces* (3 lectures), Workshop in Analysis and Probability, Texas A&M University, College Station, Texas, July 2010.
- *Automatic continuity of group homomorphisms* (4 lectures). The 10th international atelier of set theory, CIRM, Marseille, France, September 2008.

- *Ramsey theoretic techniques in the geometry of Banach spaces* (5 lectures). Summer school in Banach space theory, Castro-Urdiales, Spain, July 2008.

INVITED CONFERENCE TALKS:

- Septièmes journées Besançon–Neuchâtel d'analyse fonctionnelle, Besançon, France, June 2017.
- Noncommutative Geometry and Operator Algebras Spring Institute, Nashville, Tennessee, May 2017.
- SEALS 2017, Gainesville, Florida, March 2017 (plenary speaker).
- Toposym, Prague, Czech Republic, July 2016 (plenary speaker).
- Descriptive Set Theory in Paris, University Paris 6, December 2015.
- When Topological Dynamics meets Model Theory, Marseille, France, June 2015.
- Joint mathematics meeting, San Antonio, Texas, January 2015.
- The 13th international atelier of set theory, CIRM, Marseille, France, October 2014.
- First Brazilian Workshop in Geometry of Banach Spaces, Maresias, Brazil, August 2014 (plenary speaker).
- Logic, Dynamics, and Their Interactions II, University of North Texas, Denton, June 2014 (plenary speaker).
- Andrzej Mostowski Centenary Conference, University of Warsaw, Poland, October 2013.
- Descriptive Set Theory Workshop, The Erwin Schrödinger International Institute for Mathematical Physics, Vienna, Austria, October 2013.
- AMS sectional meeting, Oxford, Mississippi, March 2013.
- Joint mathematics meeting, San Diego, California, January 2013 (ASL plenary speaker).
- von Neumann Conference, Münster, Germany, May 2012.
- Workshop on Banach spaces, Banff Research Centre, March 2012.
- AMS sectional meeting, Cornell, September 2011.
- Logic and Mathematics, University of Illinois at Urbana-Champaign, September 2011.
- Geometric group theory and logic: The elementary theory of groups, UIC, August 2011.
- Workshop on Homogeneous Structures, University of Leeds, Great Britain, July 2011.
- Third European Set Theory Conference, International Centre for Mathematical Sciences, Edinburgh, Great Britain, July 2011.
- Annual meeting of the Association for Symbolic Logic, Berkeley, March 2011 (plenary speaker).
- Set theory meeting, Oberwolfach, Germany, January 2011.
- The 11th international atelier of set theory, CIRM, Marseille, France, October 2010.
- AMS sectional meeting, UCLA, October 2010.
- Automorphism Groups of Topological Structures, Ben Gurion University of the Negev, Israel, June 2010.
- Functional Analysis Valencia, Valencia, Spain, June 2010.
- Spring Topology Conference, Mississippi State University, Starkville, March 2010 (semi-plenary).
- Descriptive Set Theory in Paris, University Paris 6, December 2009.
- Midwest dynamics meeting, UIC, November 2009.
- MAMLS, Rutgers, New Brunswick, October 2009.
- ESI workshop on large cardinals and descriptive set theory, Vienna, June 2009.
- Spring topology conference, University of Florida, Gainesville, March 2009.
- Joint mathematics meeting, Washington D.C., January 2009 (ASL plenary speaker).
- Joint mathematics meeting, Washington D.C., January 2009.
- Descriptive Set Theory in Paris, University Paris 6, December 2008.

- Midwest model theory meeting, University of Notre Dame, November 2008.
- Very Informal Gathering of logicians, UCLA, February 2008.
- Set theory meeting, Oberwolfach, Germany, January 2008.
- Joint AMS-NZMS meeting, Wellington, New Zealand December 2007.
- AMS sectional meeting, Rutgers University, New Jersey October 2007.
- First European Set Theory Meeting, Bedlewo, Poland July 2007.
- Set theory of the reals, University of Florida, Gainesville, May 2007.
- AMS sectional meeting, Oxford, Ohio, March 2007.
- The 9th international atelier of set theory, CIRM, Marseille, France, 2006.
- Logic Colloquium 2006, Nijmegen, Netherlands, August 2006.
- Canadian mathematical society summer meeting, Calgary, June 2006.
- Banach spaces and their applications, Miami University, Oxford, Ohio, May 2006.
- AMS sectional meeting, Miami, Florida, April 2006.
- Joint mathematics meeting, San Antonio, Texas, January 2006.
- Midwest model theory meeting, Columbus, Ohio , October 2005.
- Annual meeting of the Association for Symbolic Logic, Stanford, California, 2005.
- The 8th international atelier of set theory, CIRM, Marseille, France, 2004.
- The 7th international atelier of set theory, CIRM, Marseille, France, 2002.
- Functional analysis days, Lyon, France, 2001.

EXTERNAL SEMINAR AND COLLOQUIA TALKS:

- Mathematics Colloquium, University of Virginia, Charlottesville, Virginia, April 2017.
- Geometry and Topology seminar, University of Maryland, College Park, March 2017.
- Logic seminar, University of Maryland, College Park, February 2017.
- Mathematics Colloquium, Naval Academy, Annapolis, Maryland, October 2016.
- Dynamics seminar, University of Maryland, College Park, September 2016.
- Logic seminar, University of Maryland, College Park, September 2016.
- Logic seminar, Cornell University, April 2016.
- Banach Spaces seminar/Groups and Dynamics seminar, Texas A&M University, April 2015.
- Mathematics Colloquium, University of Florida, Gainesville, December 2014.
- Topology seminar, University of Florida, Gainesville, December 2014.
- Geometry and Topology seminar, University of Chicago, November 2014.
- Logic seminar, University of Illinois at Urbana-Champaign, April 2014.
- Mathematics Colloquium, University of North Texas, Denton, November 2013.
- Undergraduate Mathematics Colloquium, University of North Texas, Denton, November 2013.
- Southern Wisconsin Logic Colloquium, University of Wisconsin-Madison, March 2013.
- Mathematics Colloquium, Universidade de São Paulo, November 2012.
- Back2Fields, 20th Anniversary Colloquium, Fields Institute, Toronto, Canada, October 2012.
- Logic seminar, University of Illinois at Urbana-Champaign, March 2012.
- Mathematics Colloquium, Cornell University, April 2011.
- Seminaire de Théorie Ergodique, Université de Rennes, May 2010.
- Logic seminar, University of Illinois at Urbana-Champaign, April 2010.
- Set theory seminar, University Paris 6, December 2009.
- Mathematics Colloquium, Rutgers University, New Brunswick, October 2009.
- Mathematics Colloquium, Universidade de São Paulo, May 2009.

- Descriptive set theory and functional analysis seminar, Universidade de São Paulo, May 2009 (2 talks).
- Analysis seminar, Universidade Estadual de Campinas, Brazil, May 2009.
- Logic seminar, University of Illinois at Urbana-Champaign, April 2009.
- Dynamical systems seminar, Northwestern University, Chicago, February 2009.
- Mathematical logic seminar, Ohio State University, Columbus, Ohio, January 2009.
- Mathematical logic seminar, University Claude Bernard, Lyon, France, December 2008.
- Logic seminar, University of Illinois at Urbana-Champaign, October 2008.
- Mathematics Colloquium, Cornell University, October 2008.
- Logic seminar, Cornell University, October 2008.
- Set theory seminar, University Paris 6, June 2008.
- Mathematics Colloquium, University of Illinois at Chicago, January 2008.
- Logic seminar, University of Illinois at Chicago, November 2007.
- Mathematics Colloquium, University of California at Irvine, November 2007.
- Set theory and Topology seminar, Universidade de São Paulo, May 2007.
- Mathematics Colloquium, Texas A&M University, College Station, January 2007.
- Initiation à l'analyse, University Paris 6, January 2007.
- Set theory seminar, University Paris 6, January 2007.
- Logic Seminar, Caltech, Los Angeles, November 2006.
- Groupes : Propriétés algébriques et équivalence élémentaire, University Paris 7, June 2006.
- Rutgers Logic Seminar, May 2006.
- Toronto Set Theory Seminar, The Fields Institute, Toronto, March 2006.
- Set Theory seminar, University Paris 6, December 2005.
- Southern Wisconsin Logic Colloquium, University of Wisconsin-Madison, November 2005.
- Logic seminar, University of Notre Dame, October 2005.
- Set Theory seminar, University Paris 6, June 2005.
- Linear analysis seminar, Texas A&M University, College Station, March 2005.
- Logic seminar, University of Illinois, Urbana-Champaign, April 2005.
- Set Theory seminar, University Paris 6, December 2004.
- Mathematics Colloquium, University of Illinois, Urbana-Champaign, December 2004.
- Logic seminar, University of Illinois, Urbana-Champaign, December 2004.
- Set Theory seminar, University Paris 6, May 2004.
- Logic Colloquium, UCLA, Los Angeles, 2004.
- The Fields Institute, Toronto, 2002.

OTHER WORKSHOP PARTICIPATION:

- Non-positive curvature, isometric actions, and dynamics of cocycles, Cajón del Maipo, Chile, May 2013.
- Workshop on Set theory and C*-algebras, American Institute of Mathematics, January 2012.
- Workshop on Model theory for metric structures, American Institute of Mathematics, September 2006.

FORMER STUDENTS:

- Bruno de Mendonça Braga, Ph.D. obtained Spring 2017. First job: Post-doc at York University, Canada.
- Konstantin Slutsky, Ph.D. obtained Spring 2012. First job: Post-doc at University of Copenhagen, Denmark.
- Phillip Wesolek, Ph.D. obtained Spring 2014. First job: Post-doc at Université catolique de Louvain, Belgium.

- Joseph Zielinski, Ph.D. obtained Spring 2016. First job: Post-doc at Carnegie Mellon University.

CURRENT STUDENTS:

- Ph.D. advisor to William Herndon (co-advisor with Daniel Groves)

RECENT SERVICE TO COLLEGE AND DEPARTMENT:

- (2015-16) Faculty Senator; Head of Departmental Advisory Committee; Head of Departmental Salary Committee; Personel Committee X; Personel Review Committee; Master exam writer.
- (2014-15) Faculty Senator; Departmental Advisory Committee; Faculty Search Committee; Personel Review Committee; Logic prelim exam writer; Master exam writer.
- (2013-14) Faculty Senator; Faculty Search committee; Salary Committee: Admissions, Fellowships, and Assistantships committee; Personel Review Committee; Master exam writer.
- (2012-13) Logic prelim exam writer.
- (2011-12) Faculty Search Committee; Math 181 coordinator; Colloquium organiser; Calculus Committee; Admissions, Fellowships, Assistantships Committee; Logic prelim exam writer; Master exam writer.
- (2010-11) Departmental Advisory Committee; 300 level Math Curriculum Committee; Admissions, Fellowships, and Assistantships committee; Logic prelim exam writer; Master exam writer.
- (2009-10) Departmental Advisory Committee; Faculty Search Committee; Graduate Studies Committee; Logic prelim exam writer; Master exam writer.

RECENT TEACHING:

- Calculus I, Math 140, Spring 2017, UMD.
- Advanced Calculus I, Math 410, Spring 2017, UMD.
- Calculus III, Math 241H, Fall 2016, UMD.
- Advanced Calculus I, Math 410, Fall 2016, UMD.
- Introduction to Advanced Mathematics, MATH 215, Spring 2016.
- Applied Linear Algebra, MATH 310, Spring 2016.
- Complex Analysis, MATH 417, Spring 2015.
- Abstract Algebra, MATH 330, Spring 2015.
- Descriptive Set Theory, MATH 511, Spring 2015.
- Abstract Algebra, MATH 330, Spring 2014.
- Linear Algebra II, MATH 425, Spring 2014.
- Descriptive Set Theory, MATH 511, Spring 2012.
- Mathematical Logic/Metamathematics I, MATH 502, Fall 2011.
- Calculus II, MATH 181, Fall 2011.
- Set Theory, MATH 504, Fall 2010.

EDITORIAL WORK:

- Editor for Ph. D. abstracts, Bulletin of Symbolic Logic.

SERVICE TO THE MATHEMATICAL COMMUNITY:

- Organiser (with J. Moore and T. Tsankov) of the semester long thematic program on Descriptive Set Theory and Polish Groups, Bernoulli Center, Lausanne, Switzerland, Spring 2018.
- Panelist for the NSF (2016).
- Head of the program committee of the ASL meeting at the National meeting of the AMS, Atlanta, Georgia, 2017.

- Organiser (with P.-E. Caprace, J. Melleray and S. Todorcevic) of the workshop 'Structure and geometry of Polish groups', CMA, Oaxaca, Mexico, June 2017.
- Organiser (with A. S. Kechris) of a special session on 'Descriptive Set Theory and its Applications' at the Sectional meeting of the AMS, Salt Lake City, Utah, 2016.
- Panelist for the NSF (2014).
- Organiser (with A. S. Kechris) of a special session on 'Descriptive Set Theory and its Applications' at the Sectional meeting of the AMS, Albuquerque, New Mexico, 2014.
- Organiser (with S. Solecki) of a special session on 'Set Theory and its Applications' at the Sectional meeting of the AMS, Oxford, Mississippi, 2013.
- Organiser (with E. Schimmerling) of 'Appalachian Set Theory Meeting', UIC, October 2011.
- Panelist for the NSF (2010).
- Organiser (with S. Todorcevic) of a special session on 'Set Theory and Banach Spaces' at the National meeting of the AMS, San Diego, California, 2008.
- Member of the program committee of the ASL meeting at the National meeting of the AMS, San Diego, California, 2008.

REPORTS FOR THE FOLLOWING ORGANISATIONS AND JOURNALS:

- ANR - Agence Nationale de la Recherche (French national research council).
- CNRS - Centre National de Recherche Scientifique (French national research centre).
- Fonds de recherche du Québec.
- Fonds Wetenschappelijk Onderzoek (Research Foundation - Flanders, Belgium)
- FCT - Fundaçaõ para a Ciência e a Tecnologia (Portuguese Research Foundation)
- Israel Science Foundation.
- Marsden Fund (of the Royal Society of New Zealand).
- NSA Mathematical Sciences Grant Program.
- NSERC - Natural Sciences and Engineering Research Council of Canada.
- NSF grant proposals, areas: Analysis, Foundations.
- Polish National Science Centre.

- Adv. Math.
- Annals Math.
- Annales Sci. de l'ÉNS
- Amer. Math. Monthly
- Ann. Pure Appl. Logic
- Arkiv der Mathematik
- Bull. Lond. Math. Soc.
- Comm. Contemp. Math.
- Compositio Math.
- Ergodic Theory Dynam. Systems
- Extracta Math.
- Fund. Math.
- Groups Geom. Dyn.
- Houston J. Math.
- Invent. Math.
- Israel J. Math.
- J. Algebra
- J. Amer. Math. Soc.
- J. Combin. Theory Ser. A
- J. Eur. Math. Soc. (JEMS)
- J. Funct. Anal.
- J. Lond. Math. Soc.
- J. Number Theory
- J. Pure Appl. Algebra
- J. Symbolic Logic
- Log. Methods Comput. Sci.
- Math. Logic Quart.
- Math. Proc. Cambridge Philos. Soc.
- Notices Amer. Math. Soc.
- Proc. Amer. Math. Soc.
- Proc. Lond. Math. Soc.
- Publications mathématiques de l'IHÉS

- Real Analysis Exchange
- Topology Appl.

- Trans. Amer. Math. Soc.
- Various conference proceedings.