

CURRICULUM VITAE

ANDRZEJ ROSŁANOWSKI

Department of Mathematics
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EDUCATION

Ph.D. Mathematical Institute of the University of Wrocław, Poland, October 1991.

Dissertation: *On game ideals*

Advisor: Jacek Cichoń.

M.A. (with distinction) Mathematical Institute of the University of Wrocław, Poland, May 1984.

Dissertation: *A decomposition of \mathbb{R}^n into two homeomorphic rigid parts*

Advisor: Bogdan Węglorz.

EMPLOYMENT

August 2008 – present:

Professor, Department of Mathematics, University of Nebraska at Omaha, Omaha NE.

August 2003 – July 2008:

Associate Professor, Department of Mathematics, University of Nebraska at Omaha, Omaha NE.

December 2005 - December 2006:

Visiting Professor, Einstein Institute of Mathematics, The Hebrew University of Jerusalem, Israel.

August 2002 – January 2003:

Visiting Assistant Professor, Department of Mathematics, University of Northern Iowa, Cedar Falls, IA

August 1999 – August 2003:

Assistant Professor, Department of Mathematics, University of Nebraska at Omaha, Omaha NE.

Date: August 7, 2018.

August 1997 – July 1999:

Visiting Assistant Professor, Department of Mathematics and Computer Science, Boise State University, Boise ID.

October 1993 – June 1997:

Postdoctoral Fellow, The Hebrew University of Jerusalem, Jerusalem, Israel.

October 1991 – May 1999:

Assistant Professor, Mathematical Institute of the University of Wrocław, Poland.

October 1991 – September 1993:

Postdoctoral Fellow, Bar-Ilan University, Ramat Gan, Israel.

June 1986 – October 1991:

Teaching Assistant, Mathematical Institute of the University of Wrocław, Poland.

October 1984–May 1985:

Junior Teaching Assistant, Mathematical Institute of the University of Wrocław, Poland.

GRANTS AND PRIZES

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College of Arts & Sciences Excellence in Research Award, University of Nebraska at Omaha, April 2015.

Research Grant awarded by the US–Israel Binational Science Foundation for the project *Creature Forcing* (joint with Professor S. Shelah; Prof. Shelah is the PI), 2012–2015.

Research Grant awarded by the US–Israel Binational Science Foundation for the project *Problems in the Theory of Forcing* (joint with Professor S. Shelah; Prof. Shelah is the PI), 2007–2011.

Schönbrunn Visiting Professorship awarded by the Hebrew University of Jerusalem and the Lady Davis Fellowship Trust, 2006.

Research Grant awarded by the US–Israel Binational Science Foundation for the project *Forcing for Set Theory of the Reals* (joint with Professors T. Eisworth, A. Blass and S. Shelah; Prof. Shelah was the PI), 2003–2006.

Assigned Research Time awarded by UNO-UCR for the project *World of Creatures*, Spring 2002/Fall 2002.

Assigned Research Time awarded by UNO-UCR for the project *Norms on Possibilities: The Cutting Lines*, Fall 2001.

Summer Fellowship awarded by UNO-UCR for the project *Baire Property and Large Continuum*, May–August 2001.

Research Grant awarded by the US–Israel Binational Science Foundation for the project *Classification theory and finite model theory* (joint with Professors G. Cherlin, M. Dzamonja, Y. Gurevich and S. Shelah; Prof. Shelah was the PI), 1999–2001.

Golda Meir Fellowship awarded by The Lady Davis Fellowship Trust for the project *Norms on possibilities*, 1994–96.

Research Grant of The Polish Committee of Scientific Research for the project *Definable forcing notions*, 1993–94.

J. Marcinkiewicz Prize for Best Mathematical Student Paper (II degree), 1984.

SHORT VISITS AND CONFERENCES ATTENDED — 2000 AND LATER

October 2016

2016 Fall Western Section Meeting, American Mathematical Society, University of Denver, Denver, CO. **Invited special session talk:** *Around Borel hulls*,

February 2015

Winter School in Abstract Analysis 2015, Hejnice, Czech Republic, Europe. **Invited tutorial lectures:** *Properness for iterations with uncountable supports*.

June/July 2014

The Hebrew University of Jerusalem, Israel — visiting Prof. S. Shelah as a part of a joint project funded by the Binational Israel–US Science Foundation.

June 2013

The Hebrew University of Jerusalem, Israel — visiting Prof. S. Shelah as a part of a joint project funded by the Binational Israel–US Science Foundation.

July 2011

Logic Colloquium 2011, Association for Symbolic Logic, Universitat de Barcelona, Spain, Europe. **Invited plenary lecture:** *The News of the Creature World — not only forcing*.

June 2011

The Hebrew University of Jerusalem, Israel — visiting Prof. S. Shelah as a part of a joint project funded by the Binational Israel–US Science Foundation.

May 2011

2011 Spring Western Sectional Meeting, American Mathematical Society, University of Nevada, Las Vegas, NV. **Invited special session talk:** *Monotone Borel hull operations for \mathcal{M} and \mathcal{N}* .

August 2008

BLAST 2008 conference in University of Denver, Colorado. Contributed talk.

July 2008

The Hebrew University of Jerusalem, Israel — visiting Prof. S. Shelah as a part of a joint project funded by the Binational Israel–US Science Foundation.

March 2008

Boise Extravaganza in Set Theory XVII, Boise, Idaho. Contributed talk.

July 2007

1st European Set Theory Meeting, Bedlewo, Poland. **Lecture on** *Bounding properties and iterations*.

March 2007

2007 Annual Meeting of Association for Symbolic Logic, Gainesville, Florida. **Invited special session talk**.

October 2005

MAMLS conference on Set Theory, Rutgers University, New Brunswick, New Jersey. **Invited lecture:** *Shelah's search for properness for iterations with uncountable supports*.

July 2005

20th Summer Conference on Topology and Its Applications, Granville, Ohio. **Invited special session talk**.

July 2004

The Hebrew University of Jerusalem, Israel — visiting Prof. S. Shelah as a part of a joint project funded by the Binational Israel–US Science Foundation.

March 2004

Spring Topology and Dynamics Conference 2004, Birmingham, Alabama. **Invited semi-plenary lecture:** *Strong ccc properties of forcing notions*.

March 2004

Boise Extravaganza in Set Theory XIII, Boise, Idaho. Contributed talk.

June 2003

2003 Annual Meeting of Association for Symbolic Logic, Chicago, Illinois. **Invited plenary lecture:** *How much sweetness is there in the Universe?*

May 2003

Set Theory and its Applications, conference in Spała, Poland. **Invited talk:** *Around Sheva-Sheva-Sheva: forcing for the λ -reals (where λ is inaccessible)*.

May 2003

University of Vienna, Austria, Europe. Talk at the Vienna Logic Seminar.

March – May 2003

The Hebrew University of Jerusalem, Israel — visiting Prof. S. Shelah as a part of a joint project funded by the Binational Israel–US Science Foundation; talk at the Jerusalem Logic Seminar.

March 2002

Boise Extravaganza in Set Theory XI, Boise, Idaho. **Invited speaker.**

January 2002

AMS – MAA – ASL Joint Mathematical Meetings, San Diego, California. **Invited talk at the AMS/ASL Special Session on *Set Theory and Classification Problems*.**

June–July 2001

The Hebrew University of Jerusalem, Israel — visiting Prof. S. Shelah as a part of a joint project funded by the Binational Israel–US Science Foundation; talk at the Jerusalem Logic Seminar.

May 2001

The Shelah Festival: Conference and Workshop, Beer–Sheva, Israel. **Mini-course:** *Forcing with norms.*

April 2001

2001 Western Sectional Meeting, American Mathematical Society, University of Nevada, Las Vegas, Nevada. **Invited talk at the special session on *Set Theory*.**

March 2001

Central Sectional Meeting, American Mathematical Society, Lawrence, Kansas. **invited talk at the special session on *Set Theoretic Topology and Boolean Algebra*.**

February 2001

Model Theory and Descriptive Set Theory, a conference in Rutgers University, New Brunswick, New Jersey. **Invited lecture:** *World of Creatures.*

November 2000

The University of Kansas, Lawrence, Kansas. Colloquium and seminar talks.

August 2000

Mathematical Challenges of the 21st Century, a meeting of American Mathematical Society, Los Angeles, California. Contributed talk.

July 2000

The Hebrew University of Jerusalem, Israel — visiting Prof. S. Shelah as a part of a joint project funded by the Binational Israel–US Science Foundation; talk at the Jerusalem Logic Seminar.

June 2000

2000 Annual Meeting of Association for Symbolic Logic, Urbana–Champaign, Illinois. **Invited talk at the special session on *Set Theory*.**

PROFESSIONAL SERVICE

Mathematical Reviews. Since 2002 I have been regularly writing reviews of research papers for *Mathematical Reviews* – *MathSciNet*. So far 86 signed reviews were published, including one *Featured Review* and a review of a book.

Referee for professional journals. I am regularly referring research papers for mathematical journals. I offered my opinion on articles submitted to the following journals:

- Algebra Universalis
- Archive for Mathematical Logic
- Annals of Pure and Applied Logic
- Canadian Journal of Mathematics
- Fundamenta Mathematicae
- Israel Journal of Mathematics
- Journal of Applied Analysis
- Journal of Symbolic Logic
- Mathematical Logic Quarterly
- Proceedings of the American Mathematical Society
- Real Analysis Exchange
- Reports on mathematical Logic
- Rocky Mountain Journal of Mathematics
- Topology and its Applications
- Transactions of the American Mathematical Society
- Utilitas Mathematica

Referee for funding agencies. I have refereed research grant proposals for the following agencies:

- US National Science Foundation
- Austrian Science Fund (FWF),
- Austrian Academy of Sciences (DOC)
- L'Agence Nationale de la Recherche (ANR)
- Czech Science Foundation (GACR)
- Isaac Newton Institute for Mathematical Sciences
- Israel Science Foundation
- Marie Curie European Reintegration Grants

Editorial work.

January 2007 — December 2013: Member of the editorial board of *MLQ* - *Mathematical Logic Quarterly* – A Journal for Mathematical Logic, Foundations of Mathematics, and Logical Aspects of Theoretical Computer Science.

Membership in Professional Organizations.

Member of the American Mathematical Society.

Member of the Association for Symbolic Logic.

PUBLICATIONS

Research Memoirs.

- (A) Norms on possibilities I: forcing with trees and creatures, A. Rosłanowski and S. Shelah, *Memoirs of the American Mathematical Society*, **141**(671), **1999**, xii+167 pp.

Research articles published or accepted.

- (47) Not so many non-disjoint translations. A. Rosłanowski and V. Rykov. *Proceedings of the American Mathematical Society*, accepted.
Available at <http://front.math.ucdavis.edu/1711.04058>
- (46) The Last Forcing Standing with diamonds. A. Rosłanowski and S. Shelah. *Fundamenta Mathematicae*, accepted.
Available at <http://front.math.ucdavis.edu/1406.4217>
- (45) Small-large subgroups of the reals, A. Rosłanowski and S. Shelah, *Mathematica Slovaca*, **68**:473–484, 2018.
- (44) On Borel hull operations. T. Filipczak, A. Rosłanowski and S. Shelah, *Real Analysis Exchange*, **40**:129–140, **2014/15**.
- (43) Monotone hulls for $\mathcal{N} \cap \mathcal{M}$. A. Rosłanowski and S. Shelah, *Periodica Mathematica Hungarica*, **69**:79–95, **2014**.
- (42) Around cofin. A. Rosłanowski and S. Shelah. *Colloquium Mathematicum*, **134**:211–225, **2014**.
- (41) Partition theorems from creatures and idempotent ultrafilters, A. Rosłanowski and S. Shelah, *Annals of Combinatorics*, **17**:353–378, **2013**.
- (40) More about λ -support iterations of $<\lambda$ -complete forcing notions, A. Rosłanowski and S. Shelah, *Archive for Mathematical Logic*, **52**:603–629, **2013**.
- (39) Nonproper Products, A. Rosłanowski, S. Shelah and O. Spinas, *The Bulletin of the London Mathematical Society*, **44**:299–310, **2012**.
- (38) Lords of the iteration, A. Rosłanowski and S. Shelah, In: *Set Theory and Its Applications*, Contemporary Mathematics (CONM), **533**:287–330, **2011**.
- (37) Reasonable ultrafilters, again, A. Rosłanowski and S. Shelah, *Notre Dame Journal of Formal Logic*, **52**:113–147, **2011**.
- (36) Chasing Silver, A. Rosłanowski and J. Steprāns, *Canadian Mathematical Bulletin*, **51**:593–603, **2008**.
- (35) Generating ultrafilters in a reasonable way. A. Rosłanowski and S. Shelah, *Mathematical Logic Quarterly*, **54**:202–220, **2008**.
- (34) Sheva–Sheva–Sheva: Large Creatures, A. Rosłanowski and S. Shelah, *Israel Journal of Mathematics*, **159**:109–174, **2007**.
- (33) Reasonably complete forcing notions, A. Rosłanowski and S. Shelah, in: *Set Theory: Recent Trends and Applications*, volume 17 of **Quaderni di Matematica**, 195–239, **2007**, edited by A. Andretta.

- (32) Universal forcing notions and ideals, A. Rosłanowski and S. Shelah, *Archive for Mathematical Logic*, **46**:179–196, **2007**.
- (31) n -localization property, A. Rosłanowski, *Journal of Symbolic Logic*, **71**:881–902, **2006**.
- (30) How much sweetness is there in the universe? A. Rosłanowski and S. Shelah, *Mathematical Logic Quarterly*, **52**:71–86, **2006**.
- (29) Measured Creatures, A. Rosłanowski and S. Shelah, *Israel Journal of Mathematics*, **151**:61–110, **2006**.
- (28) Cofinality of the nonstationary ideal, P. Matet, A. Rosłanowski and S. Shelah, *Transactions of the American Mathematical Society*, **357**:4813–4837, **2005**.
- (27) Sweet & Sour and other flavours, A. Rosłanowski and S. Shelah, *Archive for Mathematical Logic*, **43**:583–663, **2004**.
- (26) Towards Martin’s Minimum, T. Bartoszyński and A. Rosłanowski, *Archive for Mathematical Logic*, **41**:65–82, **2002**.
- (25) Iteration of λ -complete forcing notions not collapsing λ^+ , A. Rosłanowski and S. Shelah, *International Journal of Mathematics and Mathematical Sciences*, **28**:63–82, **2001**.
- (24) Historic Forcing for Depth, A. Rosłanowski and S. Shelah, *Colloquium Mathematicum*, **89**:99–115, **2001**.
- (23) Forcing for hL and hd, A. Rosłanowski and S. Shelah, *Colloquium Mathematicum*, **88**:273–310, **2001**.
- (22) The Yellow Cake, A. Rosłanowski and S. Shelah, *Proceedings of the American Mathematical Society*, **129**:279–291, **2001**.
- (21) After all, there are some inequalities which are provable in ZFC, T. Bartoszyński, A. Rosłanowski and S. Shelah, *Journal of Symbolic Logic*, **65**:803–816, **2000**.
- (20) Two examples concerning almost continuous functions, K. Ciesielski and A. Rosłanowski, *Topology and its Applications*, **103**:187–202, **2000**.
- (19) More on cardinal invariants of Boolean algebras, A. Rosłanowski and S. Shelah, *Annals of Pure and Applied Logic*, **103**:1–37, **2000**.
- (18) On the p -rank of Ext, A. H. Mekler, A. Rosłanowski and S. Shelah, *Israel Journal of Mathematics*, **112**:327–356, **1999**.
- (17) Cardinal invariants of ultraproducts of Boolean algebras, A. Rosłanowski and S. Shelah, *Fundamenta Mathematicae*, **155**:101–151, **1998**.
- (16) Ideals without ccc, M. Balcerzak, A. Rosłanowski and S. Shelah, *Journal of Symbolic Logic*, **63**:128–148, **1998**.
- (15) Norms on possibilities II: more ccc ideals on 2^ω , A. Rosłanowski and S. Shelah, *Journal of Applied Analysis*, **3**:103–127, **1997**.
- (14) Simple forcing notions and Forcing Axioms, A. Rosłanowski and S. Shelah, *Journal of Symbolic Logic*, **62**:1297–1314, **1997**.
- (13) Localizations of subsets of ω , A. Rosłanowski and S. Shelah, *Archive for Mathematical Logic*, **35**:315–339, **1996**.

- (12) More forcing notions imply diamond, A. Rosłanowski and S. Shelah, *Archive for Mathematical Logic*, **35**:299–313, **1996**.
- (11) Adding one random real, T. Bartoszyński, A. Rosłanowski and S. Shelah, *Journal of Symbolic Logic*, **61**:80–90, **1996**.
- (10) Coinitial families of perfect sets, M. Balcerzak and A. Rosłanowski, *Journal of Applied Analysis*, **1**:181–204, **1995**.
- (9) Martin Axiom and the size of the continuum, H. Judah and A. Rosłanowski, *Journal of Symbolic Logic*, **60**:374–391, **1995**.
- (8) Examples for Souslin forcing, H. Judah, A. Rosłanowski and S. Shelah, *Fundamenta Mathematicae*, **144**:23–42, **1994**.
- (7) Mycielski ideals generated by uncountable systems, A. Rosłanowski, *Colloquium Mathematicum*, **66**:187–200, **1994**.
- (6) On Shelah’s amalgamation, H. Judah and A. Rosłanowski, *Israel Mathematical Conference Proceedings*, **6**:385–414, **1993**; Proceedings of the Winter Institute of Set Theory of Reals, Ramat-Gan 1991.
- (5) Combinatorial Properties of the Ideal \mathfrak{P}_2 , J. Cichoń, A. Rosłanowski, J. Steprāns and B. Węglorz, *Journal of Symbolic Logic*, **58**:42–53, **1993**.
- (4) The ideal determined by the unsymmetric game, L. Newelski and A. Rosłanowski, *Proceedings of the American Mathematical Society*, **117**:823–831, **1993**.
- (3) On Mycielski Ideals, M. Balcerzak and A. Rosłanowski, *Proceedings of the American Mathematical Society*, **110**:243–250, **1990**.
- (2) On Game Ideals, A. Rosłanowski, *Colloquium Mathematicum*, **59**:159–168, **1990**.
- (1) The Pinched - Cube Topology, Z. Piotrowski, A. Rosłanowski and B. M. Scott, *Pacific Journal of Mathematics*, **105**:399–413, **1983**.

Research articles submitted for publication.

- (a) Borel sets without perfectly many overlapping translations. A. Rosłanowski and S. Shelah. Reports on mathematical Logic, submitted.
Available at <http://front.math.ucdavis.edu/1806.06283>
- (b) Explicit example of collapsing κ^+ in iteration of κ -proper forcings. A. Rosłanowski. Reports on mathematical Logic, submitted.
Available at <http://front.math.ucdavis.edu/1808.01636>

Unpublished notes, Other publications.

- The ideals determined by Souslin forcing notions, H. Judah and A. Rosłanowski, unpublished notes (incorporated to: T. Bartoszyński, H. Judah, **Set Theory: on the structure of the real line**, A K Peters, Wellesley, MA, 1995; pages 193–203).
- Laureaci nagrod: Sławomir Solecki, A. Rosłanowski, *Wiadomości Matematyczne/Polish Mathematical Society*, **47**:108–111, 2011.