

Piotr W. Nowak

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EMPLOYMENT

Texas A&M University

Visiting Assistant Professor, since September 2008

Institute of Mathematics of the Polish Academy of Sciences (IMPAN)

Visiting Researcher, July-December 2007

EDUCATION

Vanderbilt University

PhD in Mathematics, May 2008; advisor: Guoliang Yu

MA in Mathematics, May 2006

University of Warsaw

Magister in Mathematics, June 2003; advisor: Henryk Toruńczyk

Licencjat in Mathematics, June 2001

AWARDS

Bjarni Jónsson Prize for Research, Vanderbilt University, 2008

Marcinkiewicz Prize, Polish Mathematical Society, 2003

GRANTS

National Science Foundation Grant DMS-0900874 (Principal Investigator), 2009-2012

Foundation for Polish Science, Travel Grant, 2007

Other funding:

Summer Research Award, Vanderbilt University, 2005 and 2007

Travel Grant, Vanderbilt University, 2005 and 2008

RESEARCH INTERESTS

Geometric functional analysis on groups and metric spaces. Large scale geometry.

Geometric group theory. Global analysis on manifolds. Non-commutative geometry.

SELECTED
ARTICLES

R.G. Douglas, P.W. Nowak, *Hilbert C^* -modules and amenable actions*.
arXiv:0908.1173v1 [math.FA] (preprint)

P.W. Nowak, J. Špakula, *Controlled coarse homology and isoperimetric inequalities*.
arXiv:0809.3286v3 [math.GR] (preprint)

P.W. Nowak, *Kazhdan constants and the spectrum of the Laplacian on generating sets*.
(preprint)

P.W. Nowak, *Zero-in-the-spectrum conjecture on regular covers of compact manifolds*.
Commentarii Mathematici Helvetici **84** (1) (2009), 213–222.

P.W. Nowak, *Isoperimetry of group actions*.
Advances in Mathematics **219** (1) (2008), 1–26.

P.W. Nowak, *Coarsely embeddable metric spaces without Property A*.
Journal of Functional Analysis **252** (1) (2007), 126–136.

P.W. Nowak, *On exactness and isoperimetric profiles of discrete groups*.
Journal of Functional Analysis **243** (1) (2007), 323–344.

EXPOSITORY

P.W. Nowak, G. Yu, *What is . . . Property A?*
Notices of the American Mathematical Society **55** (2008), no. 4, 474–475.

P.W. Nowak, G. Yu, *Large Scale Geometry* (book).
in preparation, draft available at <http://www.math.tamu.edu/~pnowak/>

TALKS

Wabash Modern Analysis Seminar, Wabash College, November 2009

International Workshop/AMS Special Session on Concentration, Functional Inequalities and Isoperimetry, Florida Atlantic University, October 2009

Conference on Algebraic Topology, University of Warsaw, July 2009

Affine Isometric Actions of Discrete Groups, Die Eidgenössische Technische Hochschule Zürich (ETHZ) - Centro Stefano Franscini, Ascona, June 2009

Noncommutative Geometry Seminar, Vanderbilt University, April 2009

Workshop in Analysis and Probability, Texas A&M University, July 2008

Analysis on Groups, University of Puerto Rico, San Juan, March 2008

Geometric Group Theory Seminar, Ohio State University, February 2008

International Conference on Geometric Topology, Dubrovnik, October 2007

First Joint Meeting of the AMS and the Polish Mathematical Society, Special Session on Geometric Group Theory, Warsaw, July 2007

Semester on Amenability, Erwin Schrödinger Institute, Vienna, July 2007

Colloquium, University of North Carolina at Greensboro, March 2007

4th East Coast Operator Algebras Symposium, Georgia Institute of Technology, September 2006

Workshop in Analysis and Probability, Texas A&M University, July 2006

Metric Geometry and Geometric Embeddings of Discrete Metric Spaces, Texas A&M University, July 2006

Geometry and Differential Topology Seminar, University of Wroclaw, June 2006

Banach Spaces and Their Applications in Analysis, Miami University, May 2006

40th Spring Topology and Dynamics Conference, University of North Carolina at Greensboro, March 2006

Algebraic Topology Seminar, University of Warsaw, December 2005, June 2006

Geometric Functional Analysis Seminar, Pennsylvania State University, February 2006

Colloquium, Polish Academy of Sciences, Warsaw, January 2006

Geometric Topology Seminar, University of Warsaw, December 2005, 2006, 2007

AMS Sectional Meeting #1010, Special Session on Geometry and Algorithms in Metric Spaces, October 2005

Lecture series

Mini-course on Property A at *Limits of Graphs in Group Theory and Computer Science*, Centre Interfacultaire Bernoulli at Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland, June 2007

Upcoming talks

44th Spring Topology and Dynamics Conference, Geometric Group Theory/Geometric Topology session, Mississippi State University, March 2010

RESEARCH VISITS

Paris VII (visiting Andrzej Żuk), January 2010

Vanderbilt University (visiting Guoliang Yu), April 2009

University of Southampton (visiting Graham Niblo, Jacek Brodzki and Nick Wright), July 2008, January 2010

University of North Carolina at Greensboro (visiting Greg Bell), March 2007

TEACHING

Texas A&M University

math 251: Engineering Mathematics III (2 sections), Fall 2009

math 308: Differential Equations, Spring 2009

math 302: Discrete Mathematics, Fall 2008

Vanderbilt University

math 150A: Calculus I, Spring 2008

math 205B: Multivariable Calculus and Linear Algebra (TA), Spring 2007

math 150A: Calculus I, Fall 2006

math 155B: Accelerated Calculus II (TA), Spring 2006

math 155B: Accelerated Calculus II (TA), Fall 2005

SYNERGISTIC
ACTIVITIES

Summer Educational Enrichment in Math (SEE-Math) for 6th-8th-graders, 2009
Editorial Review Board, Vanderbilt Undergraduate Research Journal, 2005-2008

PROFESSIONAL
SERVICE

Reviewer for AMS *Mathematical Reviews* (19 reviews published)

Refereed for *Fundamenta Mathematicae*, *Groups Geometry and Dynamics*, *Houston Journal of Mathematics*, *Journal of Mathematical Analysis and Applications*, *Journal of Noncommutative Geometry*, *New York Journal of Mathematics*, *Proceedings of the American Mathematical Society*, conference proceedings.

REFERENCES

Ronald G. Douglas,	Texas A&M University
Alexander N. Dranishnikov,	University of Florida
Rostislav I. Grigorchuk,	Texas A&M University
William B. Johnson,	Texas A&M University
Guoliang Yu,	Vanderbilt University
Albert Boggess (teaching reference),	Texas A&M University