

Dimitris Gatzouras

Agricultural University of Athens, Mathematics, Iera Odos 75, 118 55 Athens,
Greece

Tel: +30 210 5294133 • Fax: +30 210 5294141

E-mail: gatzoura@aua.gr

November 2011

A. GENERAL

Born: December 31, 1962, in Stuttgart, Germany

Citizenship: Greek

Employment

2010–	Associate Professor Agricultural University of Athens
2002–10	Assistant Professor Agricultural University of Athens
1999–01	GSRT Research Fellow University of Crete, Department of Mathematics
1998–99	(Spring) Visiting Assistant Professor Purdue University, Department of Statistics
1995–98	Assistant Lecturer University of Cambridge, Statistical Laboratory
1993–95	Visiting Assistant Professor University of Crete, Department of Mathematics
1992–93	Visiting Lecturer Yale University, Department of Mathematics

While in Cambridge (1995–98) I was also a Fellow in Mathematics in Downing College (elected October 1995). During the academic year 1997-98 I was the Director of Studies in Mathematics.

Long-term Visits

Spring Semester 2004-05: University of California at San Diego,
Department of Mathematics

Spring Semester 2007-08: University of California at San Diego,
Department of Mathematics

Education

Diploma (B.Sc.): Mathematics, University of Athens, 1986

M.Sc. : Department of Statistics, Purdue University, 1989

Ph.D. : Department of Statistics, Purdue University, 1992

Ph.D. Thesis

Title: Self-Affine Fractals: Deterministic and Random Constructions

Advisor: S. P. Lalley

Research

- Fractal Geometry, with emphasis in Hausdorff dimension and measure, and Minkowski dimension and Minkowski content
- Probability measures and random walks on general locally compact groups and their harmonic analysis
- Convex polytopes (including random polytopes)
- Ergodic Theory and Dynamical Systems
- Probability Theory and Stochastic Processes

Referee for

- Advances in Mathematics
- Annals of Mathematical Statistics
- Annals of Probability
- Journal of Applied Probability/Advances in Applied Probability
- Communications in Mathematical Physics
- Discrete & Continuous Dynamical Systems
- Ergodic Theory and Dynamical Systems
- Israel Journal of Mathematics
- London Mathematical Society
- Nonlinearity
- Pacific Journal of Mathematics
- Proceedings of the American Mathematical Society
- Quarterly of Applied Mathematics
- Real Analysis Exchange
- Stochastic Processes and their Applications

Seminars (Semester-long)

I have co-organized the following semester-long seminars.

(Seminars met for 2hrs/week, and talks were given by the organizers. All but last one at the University of Crete; last at the University of Athens.)

Ergodic Theory (with K. Athanassopoulos), Winter 1993-94

Ergodic Theory (with K. Athanassopoulos, continuation), Spring 1994-95

Ergodic Theorems (with K. Athanassopoulos), Winter 1999-00

Percolation and Disordered Systems (with M. Kolountzakis), Spring 1999-00
Gaussian Measures (with A. Giannopoulos), Winter 2000-01
Random Matrices (with A. Giannopoulos and Y. Kontoyannis), Winter 2004-05

Teaching

Undergraduate:

Purdue: Stat 114: Elementary Statistics*
(1987–90) Stat 225: Introduction to Probability Models
Stat 301T: Elementary Statistical Methods
Yale: Calculus of functions of one variable
Crete: Optimization
Mathematical Statistics
Stochastic Processes
Cambridge: Probability and Measure*
Markov Chains
Agricultural Statistics*
University of Athens: Statistics — Experimentation*
Agricultural Experimentation — Statistics*
Mathematical and Statistical Software*
San Diego: MATH 20C: Calculus and Analytic Geometry for Science & Engineering*
MATH 183: Statistical Methods*
MATH 181E: Time Series

Graduate:

Crete: Probability*
Cambridge: Sequential Methods*
Purdue: Stat 511: Statistical Methods (1998–99)
Agricultural Applied Statistics*
University: Experimental Design — Data Analysis*

* Repeatedly

B. PUBLICATIONS

Papers

1. Hausdorff and Box Dimensions of Certain Self-Affine Fractals (with S. Lalley), *Indiana Univ. Math. J.* **41** (1992), 533–568.
2. Statistically Self-Affine Sets: Hausdorff and Box Dimensions (with S. Lalley), *J. Theoretical Probability* **7** (1994), 437–468.
3. The Variational Principle for Hausdorff Dimension: A Survey (with Y. Peres), in *Ergodic Theory of \mathbb{Z}^d -Actions (Warwick, 1993–1994)*, London Math. Soc. Lecture Notes, Vol. **228** (M. Pollicott, K. Schmidt eds), Cambridge University Press, 1996, pp. 113–125.
4. Invariant Measures of Full Dimension for some Expanding Maps (with Y. Peres), *Ergodic Theory and Dynamical Systems* **17** (1997), 147–167.
5. Lacunarity of Self-Similar and Stochastically Self-Similar Sets, *Trans. Amer. Math. Soc.* **352** (2000), 1953–1983.
6. On the Lattice Case of an Almost Sure Renewal Theorem for Branching Random Walks, *Advances in Applied Probability* **32** (2000), 720–737.
7. On Images of Borel Measures under Borel Mappings, *Proc. Amer. Math. Soc.* **130** (2002), 2687–2699.
8. A Spectral Radius Formula for the Fourier Transform on Compact Groups and Applications to Random Walks (with M. Anoussis), *Advances in Mathematics* **188** (2004), 425–443.
9. Lower Bound for the Maximal Number of Facets of a 0/1-Polytope (with A. Giannopoulos and N. Markoulakis), *Discrete Comp. Geom.* **34** (2005), 331–349.
10. On Summing Sequences in \mathbb{R}^d (with M. Anoussis), *Illinois J. Math.* **49** (2005), 905–910.
11. A Large Deviations Approach to the Geometry of Random Polytopes (with A. Giannopoulos), *Mathematika* **53** (2006), 173–210.
12. On the Maximal Number of Facets of 0/1 Polytopes (with A. Giannopoulos and N. Markoulakis), *GAFSA Seminar Volume 2004–2005*, Lecture Notes in Mathematics, Vol. **1910** (V. D. Milman, G. Schechtman eds.), Springer, 2007, pp. 117–125.
13. On Mixing and Ergodicity in Locally Compact Motion Groups (with M. Anoussis), *J. Reine Angew. Math.* **625** (2008), 1–28.
14. Threshold for the Volume Spanned by Random Points with Independent Coordinates (with A. Giannopoulos), *Israel J. Math.* **169** (2009), 125–153.

Lecture Notes

Probability on Trees: An Introductory Climb (with Y. Peres and D. Levin), in *Lectures on Probability Theory and Statistics*, Ecole d'Été de Probabilités de Saint-Flour XXVII–1997, (P. Bernard ed.), Lecture Notes in Mathematics, Vol. **1717**, Springer Verlag, pp. 193–280.

(Y. Peres' ten lectures at the XXVII Saint-Flour Summer School in Probability, July 1997.)

C. TALKS AND CONFERENCES

Invited Talks

1. Department of Mathematics, Aristotle University of Thessaloniki, June 1991.
2. Department of Mathematics, University of Crete, July 1991.
3. Mathematics Colloquium, Indiana University – Purdue University at Indianapolis, March 1992.
4. 1st IMS New Researchers' Meeting, Berkeley, CA, August 1993.
5. 56th Annual Meeting of the IMS, San Francisco, CA, August 1993.
6. Technical University of Athens, March 1995.
7. Dynamical Systems Seminar, University of Manchester, November 1995.
8. Ergodic Theory and Dynamical Systems Seminar, University of Warwick, November 1995.
9. Analysis Seminar, University of Edinburgh, February 1996.
10. Analysis Seminar, University of St. Andrews, February 1996.
11. Colloquium, University of East Anglia, September 1996.
12. Department of Mathematics, University of Ioannina, November 1998.
13. Department of Mathematics, University of Athens, December 1999.
14. Department of Mathematics, University of the Aegean, Samos, March 2000.
15. “Two Days of Talks in Analysis”, University of Crete, June 2000.
16. “Two Days of Talks in Applied Mathematics”, Department of Applied Mathematics, University of Crete, July 2000.
17. Department of Mathematics, University of Athens, April 2002.
18. Department of Mathematics, University of Athens, December 2002.
19. Department of Applied Mathematics and Physical Sciences, Technical University of Athens, May 2003.
20. Mathematics Colloquium, University of California at San Diego, May 2005.
21. Department of Mathematics, Aristotle University of Thessaloniki, November 2005.
22. Department of Mathematics, University of Crete, November 2005.
23. 2nd Annual Conference of the European Network “Phenomena in High Dimension”, Institut Henri Poincaré, Paris, June 2006.
26. Department of Mathematics and Statistics, University of Cyprus, October 2006.
25. Séminaire d'Analyse Fonctionnelle, Université Pierre & Marie Curie (Paris VI), May 2007.
26. “Problems in Analysis 2007”, Crete, October 2007.
27. Mathematics Colloquium, University of California at San Diego, January 2008.
28. Department of Mathematics, University of the Aegean, Samos, December 2010.
29. “Geometry and the distribution of volume in convex bodies”, Kibbutz Hagoshrim and Tel-Aviv University, April 2011.

Contributed Talks

1. Actions of Lie Groups and Discrete Subgroups on Manifolds, Crete, July 1994.
2. Harmonic Analysis from the Pichorides point of view, Crete, July 1995.
3. 10th Panhellenic Conference in Mathematical Analysis, Technical University of Athens, September 2004.
4. 11th Panhellenic Conference in Mathematical Analysis, Thessaloniki, May 2006.

Conferences

1. 865th Meeting of the AMS, Tampa, Florida, March 1991.
2. 13th Midwest Probability Colloquium, Northwestern University, IL, October 1991.
3. Semi-Annual Regional Workshop in Dynamical Systems, PennState, PA, October 1992.
4. IMS 2nd International Symposium on Probability and its Applications, Indiana University, March 1993.
5. Workshop on Lattice Dynamics and Ergodic Theory, University of Warwick, July 1994.
6. Geometry Conforme, Analyse, Applications, Domain de Seillac, France, May 1995.
7. AMS-IMS-SIAM Summer Research Conference, "Smooth Dynamical Systems and Dimension Theory", University of Washington, June 1995.
8. Stochastic Analysis Meeting, Barcelona, June 1997.
9. XXVII Summer School in Probability, St. Flour, France, July 1997.
10. Random Walks Workshop in honor of P. Erdős, Budapest, July 1998.
11. Fractal Geometry and Stochastics II, Greifswald, Germany, August 1998.
12. Holomorphic Dynamics, Crete, June 1999.
13. Workshop on Fourier Analysis and Convexity, University of Milano-Bicocca, June 2001.
14. Convex Geometric Analysis, Crete, August 2001.
15. Two Days of Talks in Harmonic and Complex Analysis, Crete, May 2002.
16. Current Advances and Trends in Nonparametric Statistics, Chersonisos, Crete, July 2002.
17. Two Days of Talks in Functional Analysis for New Researchers, Crete, June 2003.
18. Phenomena in High Dimensions, Annual Conference of RTN Network, Vienna, July 2005.
19. Two Days of Talks in Analysis for New Researchers (3rd Meeting), Samos, September 2005.
20. International Conference on Complex and Harmonic Analysis in Memory of N. Danikas, Thessaloniki, May 2006.
21. Phenomena in High Dimensions, Annual Conference of RTN Network, Samos, June 2007.

D. CITATIONS

(Paper [i] of Publication list refers to item i. in “B. PUBLICATIONS”.)

Paper [1] of Publication list:

Books:

1. P. Mattila: *Geometry of Sets and Measures in Euclidean Spaces*, Cambridge University Press, 1995.
2. Ya. Pesin: *Dimension Theory in Dynamical Systems*, University of Chicago Press, 1997.
3. G. E. Edgar: *Integral, Probability and Fractal Measures*, Springer-Verlag, New York, 1998.

Papers:

1. R. Riedi: In *Fractals in the Natural and Applied Sciences*, IFIP Trans. A: Computer Sci. and Technol., A-41 (M. Novak ed.), North-Holland, 1994, pp. 313–324.
2. Y. Peres: *Math. Proc. Cambridge Philos. Soc.* **115** (1994), 437–450.
3. Y. Peres: *Math. Proc. Cambridge Philos. Soc.* **116** (1994), 513–526.
4. T. Kawabata and A. Dembo: *IEEE Trans. Inform. Th.* **40** (1994), 1564–1572.
5. M. Pollicott and H. Weiss: *J. Statist. Phys.* **77** (1994), 841–866.
6. I. Hueter and S. Lalley: *Ergodic Theory Dynam. Systems* **15** (1995), 77–97.
7. H. Hu: *Comm. Math. Phys.* **176** (1996), 307–320.
8. R. Kenyon and Y. Peres: *Israel J. Math.* **94** (1996), 157–178.
9. R. Kenyon and Y. Peres: *Ergodic Theory Dynam. Systems* **16** (1996), 307–323.
10. S. M. Jung: *Bull. Korean Math. Soc.* **33** (1996), 65–73.
11. I. Hueter and Y. Peres: *Combin. Probab. Comput.* **6** (1997), 197–204.
12. A. Edalat and J. Parry: *Electron. Notes in Theor. Comput. Sci.* **13**, Elsevier, Amsterdam, 1998, pp. 31–40.
13. H. Hu: *Comm. Math. Phys.* **191** (1998), 397–407.
14. M. P. Bernardi and C. Bondioli: *Z. Anal. Anwendungen* **18** (1999), 733–751.
15. F. M. Dekking and W. X. Li: *Monatsh. Math.* **131** (2000), 309–320.
16. Y. Peres and B. Solomyak: In *Fractal Geometry and Stochastics II* (Greifswald/Koserow, 1998) (C. Bandt, S. Graf, M. Zähle eds), Progr. Probab. **46**, Birkhäuser, Basel, 2000, pp. 95–106.

17. J. Thuswaldner: *Acta Math. Hung.* **90** (2001), 253–269.
18. P. Shang and W. He: *Journal of Northern Jiaotong University* **25** (2001), No. 3, 7–12.
19. Z. Kazim: *Glasgow Math. J.* **44** (2002), 117–123.
20. J. Neunhäuserer: *Nonlinearity* **15** (2002), 1299–1307.
21. J. Neunhäuserer: *Israel J. Math.* **128** (2002), 267–283.
22. K. Scheicher and J. Thuswaldner: *Math. Proc. Cambridge Philos. Soc.* **133** (2002), 163–182.
23. N. Jin and S. S. T. Yau: *Asian J. Math.* **8** (2004), 259–286.
24. J. G. Yu and L. X. Ding: *Acta Math. Sci. Ser. B Engl. Ed.* **24** (2004), 421–433.
25. D. J. Feng and Y. Wang: *J. Fourier Analysis Appl.* **11** (2005), 107–124.
26. K. Baranski: *Ergodic Theory Dynam. Systems* **25** (2005), 731–757.
27. N. Luzia: *Ergodic Theory Dynam. Systems* **26** (2006), 821–845.
28. N. Luzia: *Nonlinearity* **19** (2006), 2895–2908.
29. K. Baranski: *Adv. in Math.* **210** (2007), 215–245.
30. Y. Gui and W. Li: *J. Math. Anal. Appl.* **331** (2007), 62–68.
31. P. C. Allaart and K. Kawamura: *J. Math. Anal. Appl.* **335** (2007), 1161–1176.
32. A. Nilsson and P. Wingren: *Studia Math.* **181** (2007), 285–296.
33. K. Falconer and Jun Miao: *Fractals* **15** (2007), 289–299.
34. Y. Gui and W. Li: *Nonlinearity* **20** (2007), 2353–2364.
35. Y. Gui and W. Li: *J. Math. Anal. Appl.* **348** (2008), 180–192.
36. A. Kaenmaki and M. Vilppolainen: *Fundamenta Math.* **200** (2008), 69–100.
37. K. Baranski: *Discrete Cont. Dynam. Syst.* **21** (2008), 1015–1023.
38. Y. Gui and W. Li: *Nonlinearity* **21** (2008), 1745–1758.
39. X. G. He and K. S. Lau: *Math. Nachr.* **281** (2008), 1142–1158.
40. Y. Gui and Z. Zhou: in *Proceedings of the 9th International Conference for Young Computer Scientists, ICYCS 2008*, art. no. 4709439, pp. 2879–2884.
41. S. Albeverio, V. Koval, M. Pratsiovytyi and G. Torbin: *Random Operators and Stochastic Equations* **16** (2008), 181–211.

42. Y. Gui: in *2009 International Workshop on Chaos–Fractals Theories and Applications, IWCF TA 2009*, art. no. 5362041, pp. 382–386.
43. D.-J. Feng and L. Shu: *Ergodic Theory Dynam. Systems* **29** (2009), 885–918.
44. D.-J. Feng and H. Hu: *Comm. Pure Appl. Math.* **62** (2009), 1435–1500.
45. T. J. Ni and Z. Y. Wen: *Dynamical Systems: An International Journal* **24** (2009), 517–536.
46. Y. X. Gui and W. X. Li: *International J. Math.* **20** (2009), 1289–1303.
47. M. Elekes, T. Keleti and A. Máthé: *Ergodic Theory Dynam. Systems* **30** (2010), 399–440.
48. Y. X. Gui and W. X. Li: *Acta Math. Sinica (Engl. Ser.)* **26** (2010), 731–742.
49. Y. X. Gui: *Acta Math. Sinica (Engl. Ser.)* **26** (2010), 1369–1382.
50. J. Chen and Y. Pesin: *Nonlinearity* **23** (2010), R93–R114.
51. Y. Gui and W. Li: *Nonlinearity* **23** (2010), 495–512.
52. N. Luzia: *Discrete Cont. Dynam. Syst.* **26** (2010), 291–302.
53. M. Rams: *Nonlinearity* **23** (2010), 2423–2428.
54. A. Ferguson, T. Jordan and P. Shmerkin: *Fund. Math.* **209** (2010), 193–213.
55. M. Chen, Y. Zhou and Y. Gui: in *Proceedings – 2010 International Workshop on Chaos–Fractals Theories and Applications, IWCF TA 2010*, art. no. 5671252, pp. 471–475.
56. L. Barreira and K. Gelfert: *Ergodic Theory Dynam. Systems* **31** (2011), 641–671.
57. J. Barral and D.-J. Feng: *Nonlinearity* **24** (2011), 2563–2567.
58. N. Luzia: *Stochastics and Dynamics* **11** (2011), 627–642.
59. H. Reeve: *Fund. Math.* **212** (2011), 71–93.
60. J. Barral and D.-J. Feng: ArXiv preprint, 43 pp.
(http://arxiv.org/PS_cache/arxiv/pdf/0909/0909.4247v1.pdf).

Theses:

1. R. Riedi: An Improved Multifractal Formalism and Self-Affine Measures. *Ph.D. Dissertation* (C. Blatter, advisor), ETH Zürich, Department of Mathematics, 1993.
2. S. Shin: Measures that maximize weighted entropy for factor maps between subshifts of finite type. *Ph.D. Dissertation* (K. Petersen advisor), University of North Carolina at Chapel Hill, Department of Mathematics, 1999.

3. J. Neunhäuserer: An analysis of dimensional theoretical properties of some affine dynamical systems. *Ph.D. Dissertation* (J. Schmeling advisor), Freie Universität Berlin, Fachbereich Mathematik, 1999.
4. N. Luzia: A variational principle for dimension for a class of non-conformal repellers. *Tese doutoramento* (M. Viana advisor), Instituto de Matemática Pura e Aplicada, IMPA, 2005.
5. J. Miao: The Geometry of Self-Affine Fractals. *Ph.D. Dissertation* (K. Falconer advisor), University of St. Andrews, 2008.
6. J. Neunhäuserer: Die Fat Baker's Transformation — Ein Gegenbeispiel zum Variationsprinzip der Hausdorff Dimension. *Diplomarbeit*, Freie Universität Berlin, Fachbereich Mathematik, 1996.
7. A. Nilsson: Dimensions and Projections, *Licentiate Thesis*, Umea University, Department of Mathematics and Mathematical Statistics, 2006.
(http://www.diva-portal.org/diva/getDocument?urn_nbn_se_umu_diva-939-2_fulltext.pdf.)

Paper [2] of Publication list:

Books:

1. P. Mattila: *Geometry of Sets and Measures in Euclidean Spaces*, Cambridge University Press, 1995.
2. G. E. Edgar: *Integral, Probability and Fractal Measures*, Springer-Verlag, New York, 1998.

Papers:

1. M. Dekking: In *Proceedings of the Topology and Geometry Research Center*, Vol. **7** (1996) (I. B. Jung and S. Lee eds), Kyungpook National University, Taegu, Korea, pp. 39–61.
2. X. Hu: *J. Math. Res. Exp.* **18** (1998), 305–314.
3. J. H. Yu, B. Z. Li and L. H. Huang: *Chinese Ann. Math. Ser. A* **20** (1999), No. 2, 203–212.
4. J. H. Yu: *Acta Math. Sci. Ser. A Chinese Ed.* **21** (2001), No. 4, 443–452.
5. A. Berlinkov and D. Mauldin: *J. Theor. Probab.* **15** (2002), 695–713.
6. J. G. Yu and L. X. Ding: *Acta Math. Sci. Ser. B Engl. Ed.* **24** (2004), 421–433.
7. J. Yu and N.-R. Shieh: *Acta Math. Sci. Ser. B Engl. Ed.* **27** (2007), 456–464.
8. Y. Gui and W. Li: *Nonlinearity* **21** (2008), 1745–1758.
9. Y. Gui and W. Li: *Nonlinearity* **23** (2010), 495–512.
10. K. Falconer and J. Miao: *Mathematika* **56** (2010), 61–76.
11. M. Rams: *Nonlinearity* **23** (2010), 2423–2428.
12. N. Luzia: *Stochastics and Dynamics* **11** (2011), 627–642.

Theses:

1. A. Berlinkov: Dimensions in Random Constructions. *Ph.D. Dissertation* (D. Mauldin advisor), University of North Texas, Department of Mathematics, 2002.
2. J. Miao: The Geometry of Self-Affine Fractals. *Ph.D. Dissertation* (K. Falconer advisor), University of St. Andrews, 2008.

Paper [3] of Publication list:

Books:

1. G. Keller: *Equilibrium States in Ergodic Theory*, Cambridge University Press, 1998.

Papers:

1. K. Simon and B. Solomyak: *Ergodic Theory Dynam. Systems* **19** (1999), 1343–1363.
2. M. Moran: In *Fractal Geometry and Stochastics II* (Greifswald/Koserow, 1998; C. Bandt, S. Graf, M. Zähle eds), Progr. Probab. **46**, Birkhäuser, Basel, 2000, pp. 69–93.
3. Y. Peres and B. Solomyak: In *Fractal Geometry and Stochastics II* (Greifswald/Koserow, 1998; C. Bandt, S. Graf, M. Zähle eds), Progr. Probab. **46**, Birkhäuser, Basel, 2000, pp. 95–106.
4. F. Takens and E. Verbitski: *Regular and Chaotic Dynamics* **5** (2000), 361–382.
5. M. Moran: *Math. Nachr.* **229** (2001), 129–160.
6. S. Shin: *Ergodic Theory Dynam. Systems* **21** (2001), 1249–1272.
7. S. Shin: *Ergodic Theory Dynam. Systems* **21** (2001), 1855–1866.
8. J. Schmeling and H. Weiss: In *Proc. Symp. in Pure Math.* **69**, Amer. Math. Soc., Providence, RI, 2001, pp. 429–488.
9. K. Petersen: In *Dynamics and Randomness* (Santiago 2000, Centro de Modelamiento, Univ. of Chile; A. Maass, S. Martinez, J. San Martin eds), *Nonlinear Phenom. Complex Systems* **7**, Kluwer Acad. Publ., Dordrecht, 2002, pp. 147–217.
10. K. Petersen, A. Quas and S. Shin: *Ergodic Theory Dynam. Systems* **23** (2003), 207–223.
11. Y. Yayama: *Ergodic Theory Dynam. Systems* **29** (2009), 281–315.
12. D.-J. Feng and H. Hu: *Comm. Pure Appl. Math.* **62** (2009), 1435–1500.
13. N. Luzia: *Discrete Cont. Dynam. Syst.* **26** (2010), 291–302.
14. E. Olivier: in *Recent Developments in Fractals and Related Fields* (J. Barral, S. Seuret eds.), Birkhäuser, Boston, 2010, pp. 295–308.
15. E. Olivier: *Ergodic Theory Dynam. Systems* **30** (2010), 1503–1528.
16. D.-J. Feng: *Adv. in Math.* **226** (2011), 2470–2502.
17. J. Barral and D.-J. Feng: *Nonlinearity* **24** (2011), 2563–2567.
18. Y. Yayama: *Ergodic Theory Dynam. Systems* **31** (2011), 1563–1589.

19. Y. Yayama: *Stochastics and Dynamics* **11** (2011), 643–679.
20. J. Barral and D.-J. Feng: ArXiv preprint, 43 pp.
(http://arxiv.org/PS_cache/arxiv/pdf/0909/0909.4247v1.pdf).

Theses:

1. Y. Yayama: Dimensions of compact invariant sets of some expanding maps. *Ph.D. Dissertation* (K. Petersen advisor), University of North Carolina at Chapel Hill, Department of Mathematics, 2007.
2. E. Verbitskiy: Generalized Entropies in Dynamical Systems. *Ph.D. Dissertation* (F. Takens and H. W. Broer advisors), Rijksuniversiteit Groningen, Department of Mathematics, 2000.
3. S. Shin: Measures that maximize weighted entropy for factor maps between subshifts of finite type. *Ph.D. Dissertation* (K. Petersen advisor), University of North Carolina at Chapel Hill, Department of Mathematics, 1999.
4. J. Neunhäuserer: Die Fat Baker's Transformation — Ein Gegenbeispiel zum Variationsprinzip der Hausdorff Dimension. *Diplomarbeit*, Freie Universität Berlin, Fachbereich Mathematik, 1996.

Paper [4] of Publication list:

Books:

1. Ya. Pesin: *Dimension Theory in Dynamical Systems*, Cambridge University Press, 1997.
2. L. Barreira: *Dimension and Recurrence in Hyperbolic Dynamics*, Progress in Mathematics **272**, Birkhäuser Verlag, Basel, 2008. (Ferran Sunyer i Balaguer 2008 prize.)

Papers:

1. L. M. Barreira: In *Equadiff 95, Lisboa, Portugal, 24–29 July 1995* (L. Magalhães, C. Rocha, L. Sanchez eds), World Scientific Publ. (1998), pp. 253–257.
2. L. M. Barreira: *Math. Res. Lett.* **3** (1996), 499–509.
3. L. M. Barreira: *Ergodic Theory Dynam. Systems* **16** (1996), 871–927.
4. Y. Zhang: *Ergodic Theory Dynam. Systems* **17** (1997), 739–756.
5. K. Simon and B. Solomyak: *Ergodic Theory Dynam. Systems* **19** (1999), 1343–1363.
6. M. Moran: In *Fractal Geometry and Stochastics II* (Greifswald/Koserow, 1998; C. Bandt, S. Graf, M. Zähle eds), Progr. Probab. **46**, Birkhäuser, Basel, 2000, pp. 69–93.
7. Y. Peres and B. Solomyak: In *Fractal Geometry and Stochastics II* (Greifswald/Koserow, 1998; C. Bandt, S. Graf, M. Zähle eds), Progr. Probab. **46**, Birkhäuser, Basel, 2000, pp. 95–106.
8. F. Takens and E. Verbitski: *Regular and Chaotic Dynamics* **5** (2000), 361–382.
9. M. Moran: *Math. Nachr.* **229** (2001), 129–160.
10. L. M. Barreira: *Resenhas IMA-USP* **5** (2002), 171–230.
11. X. P. Dai: *Arch. Math.* **85** (2005), 470–480.
12. N. Luzia: *Ergodic Theory Dynam. Systems* **26** (2006), 821–845.
13. N. Luzia: *Nonlinearity* **19** (2006), 2895–2908.
14. H. H. Rugh: *Annals of Math.* **168** (2008), 695–748.
15. Y. Yayama: *Ergodic Theory Dynam. Systems* **29** (2009), 281–315.
16. W. Ingle, J. Kaufmann and C. Wolf: *Ergodic Theory Dynam. Systems* **29** (2009), 1235–1255.
17. Y. Zhao, Y. Cao and J. Ban: *Nonlinearity* **22** (2009), 2405–2416.
18. D.-J. Feng and H. Hu: *Comm. Pure Appl. Math.* **62** (2009), 1435–1500.

19. J. Ban, Y. Cao and H. Hu: *Trans. Amer. Math. Soc.* **362** (2010), 727–751.
20. J. Chen and Y. Pesin: *Nonlinearity* **23** (2010), R93–R114.
21. N. Luzia: *Discrete Cont. Dynam. Syst.* **26** (2010), 291–302.
22. E. Olivier: in *Recent Developments in Fractals and Related Fields* (J. Barral, S. Seuret eds.), Birkhäuser, Boston, 2010, pp. 295–308.
23. E. Olivier: *Ergodic Theory Dynam. Systems* **30** (2010), 1503–1528.
24. L. Barreira and K. Gelfert: *Ergodic Theory Dynam. Systems* **31** (2011), 641–671.
25. V. Climenhaga: *Ergodic Theory Dynam. Systems* **31** (2011), 1163–1182.
26. J. Barral and D.-J. Feng: *Nonlinearity* **24** (2011), 2563–2567.
27. N. Luzia: *Stochastics and Dynamics* **11** (2011), 627–642.
28. J. Barral and D.-J. Feng: ArXiv preprint, 43 pp.
(http://arxiv.org/PS_cache/arxiv/pdf/0909/0909.4247v1.pdf).

Theses:

1. Y. Yayama: Dimensions of compact invariant sets of some expanding maps. *Ph.D. Dissertation* (K. Petersen advisor), University of North Carolina at Chapel Hill, Department of Mathematics, 2007.
2. N. Luzia: A variational principle for dimension for a class of non-conformal repellers. *Tese doutoramento* (M. Viana advisor), Instituto de Matemática Pura e Aplicada, IMPA, 2005.
3. K. G. Gelfert: Abschätzungen der kapazitiven Dimension und der topologischen Entropie für partiell volumenexpandierende sowie volumenkontrahierende dynamische Systeme auf Mannigfaltigkeiten. *Ph.D. Dissertation* (V. Reitmann, advisor), Technische Universität Dresden, Fakultät der Mathematik und Naturwissenschaften, 2001.
4. E. Verbitskiy: Generalized Entropies in Dynamical Systems. *Ph.D. Dissertation* (F. Takens and H. W. Broer advisors), Rijksuniversiteit Groningen, Department of Mathematics, 2000.

Paper [5] of Publication list:

Books:

1. M. L. Lapidus and M. van Frunkenhuijsen: *Fractal Geometry and Number Theory: Complex Dimensions of Fractal Strings and Zeros of Zeta Functions*, Birkhäuser Boston Inc., Boston, MA, 2000.
2. M. L. Lapidus and M. van Frunkenhuijsen: *Fractal Geometry, Complex Dimensions and Zeta Functions. Geometry and Spectra of Fractal Strings*, Springer Monographs in Mathematics, Springer, New York, 2006.
3. V. Zupanovic and D. Zubrinic: Fractal Dimensions in Dynamics. In *Encyclopedia of Mathematical Physics* (J.-P. Francoise, G. Naber, Sheung Tsun Tsou eds), Elsevier Academic Press, 2006, pp. 394–402.
(<http://www.zpm.fer.hr/~vesna/mojweb/00373.pdf>.)

Papers:

1. N. L. Chuprikov and D. N. Zhabin: *J. Phys. A — Math. Gen.* **33** (2000), 4309–4316.
2. D. Guido and T. Isola: In *Mathematical Physics in Mathematics and Physics: Quantum and Operator Algebraic Aspects* (R. Longo editor), Fields Inst. Commun., Vol. **30**, Amer. Math. Soc., Providence, RI, 2001, pp. 171–186.
3. A. Berlinkov and D. Mauldin: *J. Theor. Probab.* **15** (2002), 695–713.
4. D. Guido and T. Isola: *J. Funct. Anal.* **203** (2003), 362–400.
5. D. Zubrinic: *Chaos Soliton Fract.* **21** (2004), 1281–1287.
6. M. Frantz: In *Proc. Symp. in Pure Math.* **72**, Part 1, Amer. Math. Soc., Providence, RI, 2004, pp. 77–91.
7. M. L. Lapidus and M. van Frankenhuijsen: In *Proc. Symp. in Pure Math.* **72**, Part 1, Amer. Math. Soc., Providence, RI, 2004, pp. 349–372.
8. B. M. Hambly and M. L. Lapidus: *Trans. Amer. Math. Soc.* **358** (2006), 285–314.
9. M. Llorente and S. Winter: *Math. Nachr.* **280** (2007), 152–170.
10. S. Winter: *Dissertationes Math. (Rozprawy Mat.)* **453** (2008), 66 pp.
11. C. Thäle: in *European congress of stereology and image analysis, ECS10*, 2009, pp. 342–348.
12. S. Winter: in *Recent Developments in Fractals and Related Fields* (J. Barrol, S. Seuret eds.), Birkhäuser, Boston, 2010, pp. 73–89.
13. M. L. Lapidus and E. P. J. Pearse: *Acta Applicandae Mathematicae* **112** (2010), 91–136.
14. C. C. Leary, D. A. Ruppe and G. Hartvigsen: *Fractals* **18** (2010), 327–341.

15. M. Meiners: *J. Appl. Prob.* **47** (2010), 811–825.
16. J. Rataj and S. Winter: *Indiana Univ. Math. J.* **59** (2010), 1661–1685.
17. M. Zähle: *Trans. Amer. Math. Soc.* **363** (2011), 2663–2684.
18. J. Lévy Véhel and F. Mendivil: *Nonlinearity* **24** (2011), 259–276.
19. S. Winter: *Commentationes Mathematicae Universitatis Carolinae* **52** (2011), pp. 205–226.
20. A. F. M. ter Elst, D. W. Robinson and A. Sikora: *J. Australian Math. Soc.* **90** (2011), 317–339.
21. D. Zubrinic: Preprint, 13 pp., to appear in *Proceedings of the 5th Isaac Conference – 2005*, University of Catania, World Scientific.
(<http://www.zpm.fer.hr/~darko/zubrinic.pdf>).

Theses:

1. A. Berlinkov: Dimensions in Random Constructions. *Ph.D. Dissertation* (D. Mauldin advisor), University of North Texas, Department of Mathematics, 2002.
2. E. P. J. Pearse: Complex Dimensions of Self-Similar Systems. *Ph.D. Dissertation* (M. Lapidus, advisor), University of California at Riverside, Department of Mathematics, 2006.
3. S. Winter: Curvature measures and fractals. *Ph.D. Dissertation* (M. Zähle, advisor), University of Jena, Institute of Mathematics, 2006.

Paper [6] of Publication list:

Papers:

1. U. Rösler, V. Topchii and V. Vatutin: *Siberian Adv. Math.* **11** (2001), 60–72.
2. J. D. Biggins and A. E. Kyprianou: *Electronic J. Probab.* **10** (2005), Paper no. 17, 609–631.
3. M. Meiners: *Stoch. Processes and their Applications* **119** (2009), 2579–2597.
4. C. Thäle: in *European congress of stereology and image analysis, ECS10*, 2009, pp. 342–348.
5. G. Alsmeyer and D. Kuhlbusch: *Münster J. of Math.* **3** (2009), to appear.
6. B. Hambly and T. Kumagai: *Comm. Math. Phys.* **295** (2010), 29–69.
7. A. Iksanov and M. Meiners: *J. Appl. Prob.* **47** (2010), 513–525.
8. M. Meiners: *J. Appl. Prob.* **47** (2010), 811–825.

Paper [8] of Publication list:

Papers:

1. L. Saloff-Coste: *Colloq. Math.* **118** (2010), 183–199.

Paper [9] of Publication list:

Books:

1. C. Zong: *The Cube — A Window to Convex and Discrete Geometry*, Cambridge University Press, 2006.
2. R. Schneider and W. Weil: *Stochastic and Integral Geometry*, Probability and Its Applications (New York), Springer-Verlag, Berlin, 2008.

Papers:

1. S. Fiorini: *Discrete Optimization* **3** (2006), 136–153.
2. R. Gillmann and V. Kaibel: *J. Comb. Theory Ser. A* **113** (2006), 799–821.
3. S. Mendelson, A. Pajor and N. Tomczak-Jaegermann: *GAFN* **17** (2007), 1248–1282.
4. P. Mankiewicz and N. Tomczak-Jaegermann: *Discrete Comp. Geom.* **41** (2009), 257–272.

Theses:

1. J. Christophe: Le polytope des sous-espaces d'un espace affine fini. *Thèse Docteur en Sciences, spécialité Mathématiques* (J.-P. Doignon directeur), Université Libre de Bruxelles, Faculté des Sciences, 2006.
2. D. Espinoza: On Linear Programming, Integer Programming and Cutting Planes. *Ph.D. Dissertation* (W. Cook advisor), Georgia Institute of Technology, School of Industrial and Systems Engineering, 2006.
3. R. Gillmann: 0/1-Polytopes. Typical and Extremal Properties. *Ph.D. Dissertation* (V. Kaibel advisor), Technische Universität Berlin, Fakultät der Mathematik und Naturwissenschaften, 2007.

Paper [11] of Publication list:

Books:

1. R. Schneider and W. Weil: *Stochastic and Integral Geometry*, Probability and Its Applications (New York), Springer-Verlag, Berlin, 2008.

Papers

1. R. Latała, P. Mankiewicz, K. Oleszkiewicz and N. Tomczak-Jaegermann: *Discrete Comp. Geom.* **38** (2007), 29–50.

Paper [12] of Publication list:

Books:

1. R. Schneider and W. Weil: *Stochastic and Integral Geometry*, Probability and Its Applications (New York), Springer-Verlag, Berlin, 2008.

Paper [14] of Publication list:

Books:

1. R. Schneider and W. Weil: *Stochastic and Integral Geometry*, Probability and Its Applications (New York), Springer-Verlag, Berlin, 2008.

Papers:

1. P. Pivovarov: *Studia Math.* **183** (2007), 15–34.
2. P. Mankiewicz and N. Tomczak-Jaegermann: *Discrete Comp. Geom.* **41** (2009), 257–272.

Theses:

1. P. Pivovarov: Volume distribution and the geometry of high-dimensional random polytopes. *Ph.D. Dissertation* (N. Tomczak-Jaegermann advisor), University of Alberta, Department of Mathematics, 2010.

Department History tracks the arrivals and departures of mathematics personnel for the department history page; a presentation of all faculty and visitors since the department started in 1963. A small history story of the department can also be updated. This is used primarily by the HR Manager. Special processes. Dimitris Gatzouras (a1). (a1). University of Cambridge. [4] Gatzouras, D. (2000). Lacunarity of self-similar and stochastically self-similar sets. Trans. Special thanks to Snir Ben-Ovadia, Keith Burns, Yair Daon, Dimitris Gatzouras, Yair Hartman, Ian Melbourne, Ofer Shwartz and Andreas Strömbergsson for indicating typos and mistakes in earlier versions of this set of notes. If you find additional errors please let me know! O.S. Dimitris Gatzouras's 5 research works with 77 citations and 26 reads, including: On images of Borel measures under Borel mappings. We formulate and verify an almost-sure lattice renewal theorem for branching random walks, whose non-lattice analogue is originally due to Nerman. We also identify the limit in these renewal theorems (both lattice and non-lattice) as the limit of Kingman's well-known martingale multiplied by a deterministic factor.