

Curriculum Vitae

Grigoris Paouris

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Personal data

Date of birth: January 26, 1973
Place of birth: Athens, Greece
Citizenship: Greek
Military Service: March 2004-March 2005

Research interests

Convex Geometric Analysis.
Functional Analysis: local theory of Banach spaces.
Probabilistic methods, Concentration of measure.

Education

2004, January : Ph.D. in Mathematics, University of Crete, Greece.
1999, November: M.Sc. in Mathematics, University of Crete, Greece.
1998, December: B.Sc. in Mathematics, University of Athens, Greece.

Ph.D. Thesis

Inequalities for the Volume of Sections and Projections of Convex Bodies. Ph.D. Thesis. 2004, Department of Mathematics, University of Crete, Greece.
Thesis advisor: A. Giannopoulos.

M.Sc. Thesis

The hyperplane conjecture for convex bodies. M.Sc. Thesis. May 1999, Department of Mathematics, University of Crete, Greece.

Thesis advisor: A. Giannopoulos.

Professional appointments

Fall 2008-present : Assistant Professor of Mathematics at Texas A&M University, Texas, U.S.A.

September 2007 - August 2008 : Assistant Professor of Mathematics/Courant Instructor at Courant Institute of Mathematical Sciences, New York, U.S.A.

December 2005 - August 2007: Post-doctoral researcher at Université de Marne-la-Vallée, Paris, France.

September 2005 - November 2005: Post-doctoral researcher at University of Athens, Athens, Greece.

March 2005 - September 2005: Post-doctoral researcher at Université de Marne-la-Vallée, Paris, France.

Publications

1. *On the isotropic constant of non-symmetric convex bodies*, Geometric Aspects of Functional Analysis (Milman-Schechtman eds.), Lecture Notes in Mathematics **1745**, Springer, Berlin (2000), 238-243 .
2. *On a local version of the Aleksandrov-Fenchel inequality for the quermassintegrals of a convex body*, with A. Giannopoulos and M. Hartzoulaki, Proc. Amer. Math. Soc. **130** (2002), 2403-2412.
3. Ψ_2 -estimates for linear functionals on zonoids, Geometric Aspects of Functional Analysis (Milman-Schechtman eds.), Lecture Notes in Mathematics **1807**, Springer, Berlin (2003), 211-222.
4. *Quermassintegrals of a random polytope in a convex body*, with M. Hartzoulaki, Arch. Math. **80** (2003), 430-438.
5. *On the ψ_2 -behavior of linear functionals on isotropic convex bodies*, Studia Math. **168** (2005), 285-299.
6. *Concentration of mass and central limit properties of isotropic convex bodies*, Proc. Amer. Math. Soc. **133** (2005), 565-575.
7. *Concentration of mass on the Schatten classes*, with O. Guédon, Ann. I. H. Poincaré - PR **43** (2007), 87-99.
8. *Concentration of mass on isotropic convex bodies*, Comptes Rendus Mathématique, **342** (2006), 179-182.
9. *Concentration of mass in convex bodies*, Geom. Funct. Anal. Vol. **16** (2006) 1021-1049.
10. *A note on subgaussian estimates for linear functionals on convex bodies*, with A. Giannopoulos and A. Pajor, Proc. Amer. Math. Soc. **135** (2007), 2599-2606.
11. *A stability result for mean width of L_p -centroid bodies*, with B. Fleury and O. Guédon, Advances in Mathematics, **214** (2007) 865-877.

12. *High dimensional random sections of isotropic convex bodies*, with D. Alonso, J. Bastero and J. Bernués, *Journal of Mathematical Analysis and Applications*, 361 (2010), 431-439.
13. *Small ball probability estimates for log-concave measures* . (to appear in *Trans. Amer. Soc.*).
14. *Small ball probability estimates, ψ_2 -behavior and the hyperplane conjecture* , with N. Dafnis. *Journal of Functional Analysis* 258 (2010), 1933-1964.
15. *Simplices in the Euclidean ball*, with M. Fradelizi and C. Schütt. (to appear in *Canadian Math. Bulletin*).
16. *Relative entropy of cone measures and L_p centroid bodies* , with E. Werner. (Submitted).
17. *On the existence of supergaussian directions on convex bodies* . Preprint.
18. *On the existence of subgaussian directions for log-concave measures* , with A. Giannopoulos and P. Valettas. (to appear in *Contemporary Mathematics*).
19. Ψ_α -*estimates for marginals of log-concave probability measures*, with A. Giannopoulos and P. Valettas. Preprint).

Teaching experience

1997-2003: Teaching Assistant at the Department of Mathematics of the University of Crete (11 semesters). Taught exercises for the following courses: Calculus, Introduction to Analysis, Linear Algebra.

2007-2008: Teaching Calculus (Fall 2007) and Combinatorics (Spring 2008) in New York University.

2008-2009: Teaching Differential Equations (Fall 2008) and Linear Algebra (Spring 2009) in Texas A& M.

2009-2010: Teaching Applied Probability (Graduate) (Fall 2009) and Calculus III (Spring 2010) in Texas A& M.

Conferences

1. International Colloquium on Convexity, Kefermarkt, Austria, April 1999.
2. Workshop on Convex Geometric Analysis, Tel Aviv University, Tel Aviv, Israel, March 2000.
3. Two days of talks in Analysis (talk), Iraklion, Crete, June 2000.
4. Workshop on Convex Geometric Analysis, Anogia, Crete, Greece, August 2001.
5. Two days of talks in Analysis for young researchers (talk), Archanes, Crete, Greece, September 2001.
6. Third International Workshop on Convex Geometry-Analytic Aspects (talk), Cortona, Italy, June 2003.
7. Two days of talks in Functional Analysis (talk), Heraklion, Crete, Greece, June 2003.
8. 10th Greek Analysis Conference (talk), Athens, Greece, October 2004.

9. Probabilistic Methods in High Dimension Phenomena, Université Paul Sabatier, Toulouse, France, January 2005.
10. Educational Workshop on Geometric Inequalities, Università degli Studi di Firenze, Italy, May 2005.
11. First Annual Conference of the Network (talk), TU Vienna, Austria, July 2005.
12. Phenomena in High Dimensions: in analysis, combinatorics, convexity, probability and mathematical physics (talk), Centre Emile Borel at IHP, Paris, France, April - June 2006.
13. Phenomena in High Dimensions (talk), Centre Emile Borel at IHP, Paris, France, June 2006.
14. Probabilistic and Combinatorial methods in Analysis (talk), Kent State University, Ohio State, USA, August 2006.
15. Convexity and Probability (talk), Freudenstadt, Germany, September 2006.
16. Convex Geometry (talk), Oberwolfach, Germany, December 2006.
17. Affine invariants, randomness and approximation in convex geometry (talk), AMS Meeting. Stevens Institute of Technology, Hoboken, NJ, USA, April 2007.
18. Convex Geometry - Analytic aspects (talk), Cortona, Italy, June 2007.
19. Annual Conference in Phenomena in High Dimensions, Samos, Greece, June 2007.
20. Fourier analytic methods in convex geometry, American Institute of Mathematics, Palo Alto, California, U.S.A., August 2007.
21. Tools in high dimensional phenomena (talk), Jaca, Spain, September 2007.
22. Algorithmic Convex Geometry (talk), American Institute of Mathematics, Palo Alto, California, U.S.A., November 2007.
23. Miniconference on Asymptotic Convex Geometry (talk), University of Missouri, Columbia, Missouri, U.S.A., March 2008.
24. Informal Regional Functional Analysis Seminar (talk), Texas A&M University, College Station, Texas, U.S.A., August 2008.
25. AMS Sectional Meeting, Special Session on Convex and Discrete Geometry and Asymptotic Analysis (talk), Vancouver, Canada, October 2008.
26. AMS Fall Eastern Section Meeting, Special Session on Convex and Integral Geometry, (talk), Middletown, USA, October 2008.
27. AMS Meeting, Special Session on Convex and Integral Geometry, (talk), San Francisco, USA, April 2009.
28. The State of Geometry and Functional Analysis. A conference in honor of Vitali Milman's 70th anniversary.(talk in Mini-symposium) Tel Aviv and the Dead sea Resort, Israel, June 2009
29. Concentration week in "Probability in Aymptotic Geometry". (Organizer). College Station, Texas, USA, July 2009.

30. International Workshop in “Concentration, Functional Inequalities and Isoperimetry” (talk). Florida Atlantic University, Florida, USA, October 2009.
31. Convex Geometry and its applications (talk), Oberwolfach, Germany, December 2009.
32. Probability and Geometry in high dimensions (talk), Paris, France, May 2010.
33. Asymptotic Geometric Analysis (talk), Saint-Petersburg, Russia, July 2010.

Short visits, Scholarships, Grants and Fellowships

1. 1999, April: Erwin Schrödinger Institute for Mathematical Physics, Vienna, Austria.
2. 2001, April - July: Institute of Mathematics of the Polish Academy of Sciences (Marie Curie Training Site).
3. 2002-2003 : Manassaki scholarship: Department of Mathematics, University of Crete .
4. 2003, September-December: Université Paris VI (Research Training Network ” Analysis and Operators” . Predoctoral grant.
5. 2005, March-September: Université de Marne-la-Vallée (Research Training Network ”Phenomena in High Dimensions” . Postdoctoral grant.
6. 2005, September-November: University of Athens. Postdoctoral grant ”Pythagoras”.
7. 2005, December-2007 : Université de Marne-la-Vallée, Intra-European Marie-Curie Fellowship. Postdoctoral grant.
8. 2006, September: Universidad de Zaragoza, Zaragoza, Spain.
9. 2007, April: University of Columbia Missouri, Missouri State, USA.
10. 2007, April: University of Kent, Ohio State, USA.
11. 2009, June: Insitute Henri Poincare, Paris, France.
12. June 2009- June 2011 : NSF grant, Award Number 0906150: “Measure-theoretic aspects of Convex bodies”.

Invited Talks

1. Institute of Mathematics, Polish Academy of Sciences (Functional Analysis Seminar), Warsaw, Poland, May 2001.
2. University of Łódź, Łódź, Poland, June 2001.
3. Université de Marne-la-Vallée, Paris, France, October and December 2003, April and June 2005, January and December 2006 and January 2007.
4. Université Paris VI (Séminaire d’Analyse Fonctionnelle), Paris, France, November 2003, June 2009.

5. Aristotle University of Thessaloniki, Department of Mathematics, Thessaloniki, Greece, November 2004.
6. University of Crete (Analysis Seminar), Crete, Greece, November 2005.
7. Universidad de Zaragoza (Analysis Seminar), Zaragoza, Spain, September 2006.
8. Polytechnic University of Brooklyn, New York, NY, U.S.A., October 2007.
9. Case Western Reserve University, Cleveland, Ohio, U.S.A., November 2007.
10. University of Alberta, Edmonton, Alberta, Canada, February 2008.
11. Texas A&M University, College Station, Texas, U.S.A. , February, March 2008.
12. Courant Institute of Mathematical Sciences, New York, U.S.A., April 2008.
13. University of Alberta, Edmonton, Canada, October 2008.
14. University of Michigan, Ann Arbor, Michigan, October 2009.
15. University of Tel-Aviv, Tel-Aviv, Israel, January 2010.