

LOREDANA LANZANI

Department of Mathematical Sciences

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EDUCATION

B.S. Mathematics	U. of Rome II (Italy)	1989
Ph.D. Mathematics	Purdue University	1997

PROFESSIONAL EXPERIENCE

Professor	U. of Arkansas	2008 –
Associate Professor	U. of Arkansas	2003-2008
Assistant Professor	U. of Arkansas	1997-2003
Teaching Assistant	Purdue University	1990-1997
Research Fellow	I.N.d'A.M. (Italy)	1989-1990
Visiting Positions:	U. of Michigan	Fall 2003 , Fall 2005
	U. of New South Wales	Summer 2003 , 2004
	CRM (Barcelona, Spain)	Summer 2003; Summer 2009
	Princeton University	Spring 1999 , 2004; Summer 2001
	University of Kentucky	Summer 2000
	Courant Institute	Spring 1997

AWARDS AND HONORS

<i>Virginia L. Chatelain Memorial Lecture</i> (Kansas State)	2009
Teaching Academy Award (<i>Student: Jessica L. Tush</i>)	2009
Robert C. & Sandra Connor Endowed Faculty Fellowship	2008
NSF Individual Research (DMS-0700815)	2007-2010
NSF Individual Research (DMS-0101212)	2001-2008
AWM Travel Mentoring	2001-2003
SILO/SURF Undergraduate Research (<i>Students: Laura J. Fields; Erin R. Mason</i>)	2001, 2003
Fulbright College Research semester	2004
Fulbright College Summer Research	2001; 2005
Italian National Research Council	1999-2001
Arkansas Science And Technology Authority	1998
Award for Excellence in Teaching (Purdue U.)	1994

Ph.D. STUDENTS

Jennifer Paulk	(2007 –)
Belen Espinosa	(2009 –)

INVITED TALKS

2010:	CRM Pisa (Italy); Brown U.; Gargnano (Italy); Marrakesh (Morocco).
2009:	AMS meeting #1047; U. Virginia; Trento (Italy); CRM Barcelona (Spain); Rouen (France); Kansas State U.; ESI (Austria); CMS (Canada).
2008:	Kentucky; Ohio State; Oberwolfach (Germany).
2007:	Calderon-Zygmund Seminar (Chicago); AMS meeting #1025; Georgia Tech; SCV Fest (Ann Arbor); Washington U.; Workshop in PDEs and SCV (Brazil); Banach Center (Poland); U. Rome II (Italy); AMS meeting # 1031.
2006:	Midwest PDE Seminar (UIC); AMS meeting # 1015; U. of Notre Dame; Banff (Canada);

- 2005: AMS meeting # 1004; ESI (Austria); Oberwolfach (Germany); U. Western Ontario;
 2004: Centro De Giorgi (Pisa, Italy); U. of Toronto; AMS meeting #1000;
 2003: U. of Barcelona (Spain); U. of New South Wales; U. of Michigan.
 2002: U. of Kentucky; U. of Wisconsin; AMS Meeting #982.
 2001: Oklahoma State; U. of Michigan; CMFT, Aveiro (Portugal);
 Workshop on PDE, S. Paulo (Brasil); AMS meetings: #964; #967; #972.
 2000: NATO Advanced Research Workshop, Prague; AMS meeting #953;
 Weimar Bauhaus Universitat (Germany).
 1999: ANU (Canberra); Rutgers; Temple; AMS meetings: #939; #945; #946.
 1998: U. of Kansas; AMS meeting #933.

RESEARCH

17. Barrett, D. E. and Lanzani L., *The Leray transform on weighted boundary spaces for convex Reinhardt domains*, J. Funct. Analysis, to appear.
16. Koenig, K. and Lanzani, L. *Bergman vs. Szegő via Conformal Mapping* (22 pages), Indiana Univ. Math. J. **58**, no. 2 (2009), 969-997.
15. Lanzani, L. *Cauchy Integrals for non-smooth domains: \mathbb{C}^n vs. \mathbb{C} – the effect of dimension*, Oberwolfach Reports **32** (2008), 55-60.
14. Brown, R., Capogna, L. and Lanzani, L. *On the Mixed Boundary Value Problem for Laplace's Operator on Lipschitz Planar Domains*, Math. Annalen, **342** (2008), 91-124.
13. Lanzani, L. and Mendez, O. *The Poisson Problem for the Laplacian with Robin Boundary Condition in Non-Smooth Domains*. Revista Matematica Iberoamericana **22** (2006) 181-204.
12. Lanzani, L. and Stein, E. M. *A note on Div-Curl inequalities*, Mathematics Research Letters **12** (2005), 57-61.
11. Capogna, L., Kenig, C., Lanzani, L., *Recent Progress in Harmonic Measure: the Geometric and the Analytic Points of View*, AMS University Lecture Series (book), **35** (2005), ISBN: 0821827286.
10. Lanzani, L. Shen, Z., *On the Robin Problem for the Laplace Equation in C^1 and Lipschitz Domains in \mathbb{R}^n* , Comm. Part. Diff. Eq. **29** (2004), 91-109.
9. Lanzani, L. and Stein, E. M., *Szegő and Bergman Projections on Non-Smooth Planar Domains*. J. Geom. Anal. **14** (2004), 63-86.
8. Bernstein, S. and Lanzani, L., *Szegő Projections for Hardy Spaces of Monogenic Functions and Applications*. Int. J. of Math. and Math. Sc., **29** (2002), 613-627.
7. Lanzani, L. *The Cl_n -Valued Robin Boundary Value Problem on Lipschitz Domains in \mathbb{R}^n* , Clifford Analysis and its Appl. NATO ARW Series (2001), Kluwer, 183-192.
6. Lanzani, L. *Cauchy Transform and Hardy Spaces for Rough Planar Domains* Contemp. Math., **251** (2000), 409-428.
5. Lanzani, L., *Szegő Projection Versus Potential Theory For Non-Smooth Planar Domains*. Indiana Univ. Math. J. **48** (1999), 537-556.
4. Capogna, L., Cowling M. and Lanzani, L. *Boundary regularity of biholomorphic maps via geometric function theory*, in preparation.
3. Fornaess, J. E. and Lanzani, L. *Complex Div-Curl: A Real Analysis approach to the $\bar{\partial}$ -problem*, in preparation.
2. Lanzani, L. and Munasinghe, S. *Hardy Spaces and Cauchy-type singular integrals for spaces of differential forms*, in preparation.
1. Lanzani, L. and Stein E. M., *Cauchy-type integrals on non-smooth domains in \mathbb{C}^n* , in preparation.

SYNERGISTIC ACTIVITIES

- Faculty advisor of student-based group: *Arkansas Women in Statistics and*

Mathematics (AWSM) – web: <http://comp.uark.edu/~aws/>.

- Lead organizer, *Workshop in Real Analysis, Complex Analysis and Boundary Value Problems*, Banff International Research Station (2010).
- Co-organizer, *Arkansas Spring Lecture Series*: 1999, 2000, 2001, 2002, 2008 and 2009.
- Co-organizer, Special Session on *Harmonic Analysis and Partial Differential Equations in Real and Complex Domains*, AMS meeting # 1037 (March 2008).
- Co-organizer, Special Session on *Boundary Operators in Real and Complex Domains*, AMS meeting # 1022 (October 2006).
- AMS *Centennial Fellowship* Selection Committee (2009-2011).
- AMS *Southeastern Sectional Program* Committee (2006-2008).
- Organizer, University of Arkansas Mathematics Dept. Analysis Seminar: 1997 -2007.
- Editor, *Harmonic Analysis and Boundary Value Problems: Selected Papers from the 25th University of Arkansas Spring Lecture Series* Contemp. Math. **277** (2001).