

Publications for 2004

Refereed Article Publications

Author	Title
Andrew Acker	(with A. Henrot, M. Poghosyan, H. Shagholian) "The multilayer free boundary problem for the p-Laplacian in convex domains ". Interfaces and free boundaries 6(2004), 486-498.
Alexandre Boukhgueim	(with G.V.Gyatlov,V.B.Kardakov,E.V.Tantserev) "Uniqueness in one inverse problem for elastisity system ", Sibirian Mathematical Journal,45(2004):747-757.
Dharam Chopra	(with R. Dios) Further investigations on balanced arrays of strength six.The Journal of Combinatorial Mathematics and Combinatorial computing 48,2004,pp.89-94.
Dharam Chopra	(with M Bsharat) Some necessary existence conditions for balanced arrays of strength eight.Congressus Numerantium 165,2003,pp.135-140.
Thomas DeLillo Alan Elcrat	T. DeLillo, A. Elcrat, and J. Pfaltzgraff, "Schwarz-Christoffel mapping of multiply connected domains ", Journal d 'Analyse Mathematique, 94 (2004).
Alan Elcrat	(with Ray Treinen and Tae-Un Kim)"Annular capillary surfaces," Arch.Math.82(2004):449-467.
Alan Elcrat	(with Robert Neel and David Siegel) "Equilibrium configurations for a floating drop", J.Math.Fluid.Mech.XX(2004).1-25.
Victor Isakov	(with J. Cheng, M. Yamamoto, Q. Zhou) "Lipschitz stability in the lateral Cauchy problem for elasticity system ", J. Math. Kyoto Univ., 43 (2003): 475-501.
Victor Isakov	(with T. Hrycak) "Increased stability in the continuation of solutions to the Helmholtz equation ", Inverse Problems, 20(2004): 697-712.
Victor Isakov	"Carleman Estimates and Applications to Inverse Problems ", Milan J. Math., 72 (2004): 249-271.
Thalia Jeffres	"Regularity of the Heat Operator on a Manifold with Cylindrical Ends," Pacific J. Math. 215 (2004), no. 2, 331-345.
Kirk Lancaster	(with Jeremy Stanley), "On the Asymptotic Behavior of Solutions of Quasilinear Elliptic Equations," Annali dell ' Universita di Ferrara, Vol. IL (2003), 85-125. refereed (not reported as published in the 2003 Annual Report)
Chunsheng Ma	"The use of the variogram in construction of stationary covariance models ", Journal of Applied Probability, 41 (2004), 1093-1103.
Chunsheng Ma	"Spatial autoregressions and related spatio-temporal models ", Journal of Multivariate Analysis, 88(2004), 152-162.
Hari Mukerjee	(with H. El Barmi), "Consistent estimation of distributions with Type II bias with applications in competing risks problems," The Annals of Statistics, 32(2004): 245-267.
John Robertson	"The Geometry of Some Natural Conjugacies in \mathbb{C}^n Dynamics", International Journal of Mathematics and Mathematical Sciences, 67(2004):3685--3693.

Ziqi Sun	"A Pinching Theorem on Submanifolds with Parallel Mean Curvature Vectors, " Colloquium Mathematicum, 98(2003):189-199.
Ziqi Sun	"Inverse Boundary Value Problems for a Class of Semilinear Elliptic Equations, " Advances in Applied Mathematics, 32(2004):791-800.
Christian Wolf	(with L. Barreira and L. Radu), "Dimension of measures for suspension flows, Dynamical Systems," 19 (2004), no. 2, 89--107.
Christian Wolf	(with M. Urbanski), "SRB measures for Axiom A endomorphisms, Mathematical Research Letters," 11 (2004), 785-797.

Book Publications

Author	Title
Victor Isakov	"Inverse Problems for PDE " (A revised (new 50 pages) edition submitted to Springer-Verlag, New York in December 2004)

Published Conference Proceedings

Author	Title
Beth Clarkson Anna Sue Neal	"Excelling with Statistics, " Proceedings of the Hawaii International Conference on Statistics, Mathematics and Related Fields. Honolulu, HI
Buma Fridman	"Perturbation of domains in \mathbb{C}^n and automorphism groups", Proceedings of the International Conference on Complex Analysis in Several Variables at Mid Sweden University, Sunsvalle, Sweden.
Chunsheng Ma	"Recent developments on the construction of spatio-temporal covariance models", 2nd Spanish Workshop on Spatio-Temporal Modelling of Environmental Processes, June 1-3, 2004, Granada, Spain.
Chunsheng Ma	"On the linear combination of spatio-temporal covariances and variograms", Joint Statistical Meetings, August 8 - 12, 2004, Toronto, Canada.
Phillip Parker	C. Jang and P. E. Parker, "Examples of conjugate loci of pseudoriemannian 2-step nilpotent Lie groups with nondegenerate center," in Recent Advances in Riemannian and Lorentzian Geometries, eds. K. ,L. Duggal and R. Sharma. Contemp. Math. 337. Providence: AMS, 2004. pp. ,91--108. (refereed)
Phillip Parker	"Geometry of bicharacteristics, in Advances in Differential Geometry and General Relativity, eds. S. Dostoglou and P. Ehrlich. Contemp. Math. 359. Providence: AMS, 2004. pp. ,31--40. (refereed)

Formal Papers Delivered at Professional Meetings

Author	Title
Andrew Acker	"On the existence of convex solutions to the generalized Prandtl-Batchelor free boundary problem, " Fifth European Conference on Elliptic and Parabolic Problems, Gaeta, Italy, May 30-June 3, 2004.
Andrew Acker	"Operator and fixed point methods in free boundary problems, " AIMS 5th International Conference on Dynamical Systems and Differential Equations, Pomona, CA, June 16-19, 2004.
Alexandre Boukhgueim	"Attenuated vector tomography on the plane ", Iowa PDE/Applied Math Seminar,Ames,Iowa,October 09,2004
Alexandre Boukhgueim	(with A.A.Bukhgeim and S.G.Kazansev) "New methods in tensorial tomography for medicine and seimology ", Perspectives in Inverse Problems,Helsinki,Finland,June 2004.
Dharam Chopra	D.V.Chopra.and R.Dios. "Further contributions to the nonexistence of orthogonal arrays", Thirty-Fifth International conference on Combinatorics,Graph theory,and Computing held in Boca Raton(Florida),March 2004.
Dharam Chopra	R.Dios and D.V.Chopra, "Further investigations on Orthogonal arrays of strength four", Eighteenth Mid-West Conference on Combinatorics,Cryptography,and computing held in Rochester(NY),October 2004.
Dharam Chopra	D.V.Chopra.and S.M.Lee, "On Q(a)P(b)-Super edge-graceful graphs.Eightennth", Mid-West Conference on combinatorics,cryptography,and Computing in Rochester (N.Y.),October 2004.
Dharam Chopra	"Contributions to some combinatorial arrays", International Conference on the Future of statistical theory,practice,and education held in December 2004.
Alan Elcrat	"Computation of axisymmetric equilibrium capillary surfaces", AIMS 5 th Int.Conf. Dyn. Syst.&DE, Pomona,Cal.,June 16-19,2004.
Alan Elcrat	"Point vortices in the presence of a solitary wave", Siam: Nonlinear Waves and Coherent Structures, Orlando, Florida, October 2-5.
Buma Fridman	"Perturbation of domains in \mathbb{C}^n and automorphism groups", International Conference on Complex Analysis in Several Variables at Mid Sweden University, Sunsvalle, Sweden.
Victor Isakov	"Inverse Problems for dynamical Lamé systems ", Miniworkshop on Applied Computational Inverse Problems, Florence, Italy, March 2004.
Victor Isakov	"The Inverse Option Pricing Problem ", International Workshop Risk Management and Model Specifications Issues in Finance, IMA, Univ. of Minnesota, Minneapolis, MN, April 2004.
Victor Isakov	"Inverse Problems for the elasticity systems ", International Conference "Perspectives in Inverse Problems ", Helsinki, Finland, May 2004.
Victor Isakov	"Increased stability in the Cauchy and related inverse problems ", International Conference on Inverse Problems: Modeling and Simulation, Fethiye, Turkey, June 2004.

- Zhiren Jin** "Existence of solutions of the prescribed mean curvature equation on unbounded domains ", Special session on Nonlinear Partial Differential Equations, American Mathematical Society 2004 Annual Meeting, Phoenix, Arizona, January 2004.
- Kirk Lancaster** Maria Athanassenas and Kirk Lancaster, "CMC capillary surfaces at reentrant corners", AIMS Fifth International Conference on Dynamical Systems and Differential Equations, Pomona, CA, June 16-19, 2004.
- Hari Mukerjee** "Inferences under stochastic ordering: the k-sample case", WNAR/IMS Western Regional Meeting, Albuquerque, NM, June 17.
- Phillip Parker** "Conjugate Loci of pseudoRiemannian 2-step Nilpotent Lie Groups with Nondegenerate Center," Special Session on Curvature and Geodesics, VI Joint Meeting AMS-SMM, Houston TX, May 2004.
- Phillip Parker** "Geometry of Nonlinear Connections," Special Session on Geometric Analysis in Mathematical Physics, Fourth World Congress of Nonlinear Analysts, Orlando FL, July 2004.
- John Robertson** Misha Lyubich and John Robertson, Preliminary Report "The Critical Locus of Hénon Maps", AMS Sectional Meeting, Athens, Ohio, March 2004.
- John Robertson** Misha Lyubich and John Robertson, Preliminary Report "The Critical Locus of Hénon Maps", Joint French Canadian Conference, Toulouse, France, July 2004.
- Ziqi Sun** "Conjectures in Inverse Boundary Value Problems for Quasilinear Elliptic Equations", The Second International Conference on Inverse Problems, Shanghai, June 2004.
- Christian Wolf** "Dynamics of polynomial automorphisms in C^n ", Prairie Analysis Seminar, University of Kansas, November 2004
- Christian Wolf** "Measures of maximal dimension for hyperbolic diffeomorphisms", Conference of differential equations and dynamical systems, Pomona California, June 2004

Book Reviews Published in Professional Journals and Abstracts

Author	Title
Alexandre Boukhgueim	(with A.A.Bukhgeim) "Tomography problems and the theory of A-analytic functions," Abstract on the 5th International Conference on Inverse Problems in Engineering:Theory and Practice,Cambridge,UK.
Dharam Chopra	"Applied Probability," K.Lange.Choice 41(No.1),2003,pp.187.
Dharam Chopra	"A course in financial calculus," A.Etheridge, Choice 40(No.9),2003,pp.1582.
Dharam Chopra	"Making history count:a primer in quantitative methods for historians," C.Feinstein, Choice 40(No.8),2003,pp.1397.
Dharam Chopra	"Stochastic processes and their applications," F.Beichelt and L.Fatti.Choice 40(No.6),2003, pp.1017.
Dharam Chopra	"Methods of multivariate statistics," M.S.srivastava.Choice 40(No.5),2003,pp.858.
Anna Sue Neal	"Preparing Mathematics and Science Teachers for Diverse Classrooms," A. Rodriguea and R. Kitchen, Mathematics Teacher Magazine (204).