

# Publications for 2002

## Refereed Article Publications

Author	Title
Acker, Andrew	"On the existence of convex classical solutions to a generalized Prandtl-Batchelor free-boundary problem-II" J. appl. Math. Phys. 53(2002):438-485 (48 pages).
Boukhgueim, Alexandre	"Reconstruction of the Memory from Partial Boundary Measurements", Contemporary Mathematics,307(2002):39-46.(with Dyatlov & G.Uhlmann)  "Recovering a Potential from Partial Cauchy Data", Communications in Partial Differential Equations,27(2002):653-668.(with G.Uhlmann)
Chopra, Dharam	R.Dios,and D.V.Chopra." On orthogonal arrays of strength four" Congressus Numerantium 152,2001,PP.125-131.  R.Dios,and D.V.Chopra." A note on balanced arrays of strength eight," Journal of Combinatorial Mathematics and Combinatorial Computing 41,2002,PP.133-138.
Fridman, Buma Ma, Daowei	On fixed points and determining sets for holomorphic automorphisms (with K. T. Kim, S. G. Krantz, D. Ma), Michigan Math J, 50(2002),507-515.  Upper semicontinuity of the dimensions of automorphism groups of domains in $C^n$ (with D. Ma, E. Poletsky) Amer. J. of Math., 125(2002)
Ho, Lop-Hiing	Sharp subelliptic estimates for $n-1$ forms on finite type domains, Illinois Journal of Mathematics, 45 (2001), No. 4, 1401-1420.
Hu, Xiaomi Mukerjee, Hari	Xiaomi Hu and Hari Mukerjee, "Constructing all extremes of contingency tables with given marginals", Journal of Computational and Graphical statistics, 11(2002): 41-10  Xiaomi Hu, Subhash C. Kochar, Hari Mukerjee and Francisco J. Samaniego, "Estimation of two ordered mean residual life functions", The Journal of Statistical Planning and Inference, 107(2002): 321-341
Isakov, Victor	(with S. Wu) "On theory and applications of the HELS method in inverse acoustics", Inverse Problems, 18 (2002), 1147-1161.  (with I. Bouchoev, N. Valdivia) "Recovery of volatility coefficient by linearization", J. Quantitative Finance, 2(2002), 257-263.  (with M. Eller, G. Nakamura, D. Tataru) "Uniqueness and Stability in the Cauchy Problem for Maxwell and elasticity systems", College de France Seminar, Vol. 14 "Studies in Mathematics and Applications", Vol.31, Elsevier Science,(2002), 329-351.
Jin, Zhiren Lancaster, Kirk	Zhiren Jin and Kirk Lancaster, A Maximum Principle for Solutions of a Class of Quasilinear Elliptic Equations on Unbounded Domains, Communications in Partial Differential Equations, Vol. 27 (7 & 8) (2002), 1271--1281.
Ma Chunsheng	Ma, C.(2002). Correlation models with long-range dependence. Journal of Applied Probability, <b>39</b> , 370-382.  Ma, C.(2002). Spatio-temporal covariance functions generated by mixtures. Mathematical Geology, <b>34</b> , 965-975.  Ma, C. (2002). Exact maximum likelihood estimation of an ARMA(1, 1) model with incomplete data. Journal of Time Series Analysis, <b>23</b> , 49-56.
Ma, Daowei	"On rigidity of Grauert tubes over Riemannian manifolds of constant curvature," Math. Z., 239(2002): 353--363. (with S.-J. Kan)

Sun, Ziqi "An inverse boundary value problem for quasilinear elliptic equations," with David Hervas, Communications in Partial Differential Equations, Vol 27 (2002): 2491-2512.

Wolf, Christian "Hausdorff and topological dimension for polynomial automorphisms of  $C^2$ ," Ergodic Theory and Dynamical Systems, 22(2002):1313-1327.

### Reports

Author	Title
Hutchinson, John	Induced Demand for Business Travel, Final Report NASA grant March 1, 2002.
	Personal Induced Demand for Travel, Survey and Results, Final Report, NASA, March 1, 2002.
	Design and Automation of the Requirements Management Process for Systems Approach for Safety Oversight (SASO) - Final Report to FAA, June 5, 2002.
	Airport Infrastructure Costs for Potential SATS Airports - Final Report, Kansas Department of Transportation, December 31, 2002.

### Published Conference Proceedings

Author	Title
Boukhgueim, Alexandre	"Reconstruction of the Memory from Partial Measurements", International Conference "Ill-Posed and Inverse Problems" Sobolev Institute Press, 2002:42. (With G.V. Dyatlov & G.Uhlmann)
	"Inverse Problems, Tomography and Corresponding Numerical Methods", Abstracts of the First International Conference "Inverse problems: Modeling and Simulation", 2002:43.
DeLillo, Thomas Hrycak, Tomasz	T. DeLillo, T. Hrycak, and N. Valdivia, "Iterative regularization methods for inverse problems in acoustics", Proceedings of the ASME International Mechanical Engineering Congress and Exposition, New Orleans, LA, paper number IMECE2002/NCA-3270, 10 pp., available on CD, (2002).
Fridman, Buma	Perturbation of domains in $C^n$ and automorphism groups, Proceedings of the 6th International Conference on Several Complex Variables and Complex Geometry, Gyeong-Ju, Korea, August 2002
Ma, Chunsheng	Ma, C. (2002). Spatio-temporal covariance models. The 28th Conference on Stochastic Processes and Their Applications, July 1-5, Melbourne, Australia.
	Ma, C. (2002). Long-range dependent covariance models in space and time. Hawaii International Conference on Statistics and Related Fields, June 5-9, Hawaii, USA.

### Book Chapters and Publications in Anthologies

Author	Title
Isakov, Victor	"Inverse Problems for quasilinear equations", Nonlinear Problems in Math. Physics and related topics, II. Kluwer, 2002, 201-212.

## Formal Papers Delivered at Professional Meetings

Author	Title
Chopra, Dharam	D.V.Chopra. Some new results on the Existence of some Bi-Level combinatorial arrays. Thirty-third International conference on Combinatorics, Graph theory, and Computing held in Boca Raton( Florida) March4-March8,2002.
	D.V.Chopra, R.Dios. Further contributions to Balanced arrays of strength six. Sixteenth Mid-West Conference on Combinatorics, Cryptography, and computing held in Carbondale (Illinois),November7-November9.
DeLillo, Thomas	T. DeLillo, T. Hrycak, and N. Valdivia, "Iterative regularization methods for inverse problems in acoustics", ASME International Mechanical Engineering Congress and Exposition, New Orleans, LA, invited talk, Nov. 2002.
	T. DeLillo and T. Hrycak, "A stopping rule for the conjugate gradient method for ill-posed problems", Acoustical Society of America meeting, Cancun, Mexico, invited talk, Dec., 2002.
Elcrat, Alan	'Annular Capillary Surfaces' at the Regional AMS meeting in Atlanta, Ga.
	'Crack Detection' at the Applied Inverse Problem Conference in Montecatini, Italy. Crack detection and Conformal Mapping at the CMFT meeting in Portugal.
Fridman, Buma	Invited talk Perturbation of Domains in $C^n$ and automorphism groups, August 2002, the 6th International Conference on Several Complex Variables and Complex Geometry, Gyeong-Ju, Korea.
	Invited talk Semicontinuity of the dimension of holomorphic automorphism groups, March 2002, Seminaire d'Analyse at the Institut de Mathématiques Université Pierre et Marie Curie (Analysis Seminar of the Poincare Mathematics Institute of the Pierre and Maria Curie University in Paris, France).
Hu, Xiaomi	Xiaomi Hu, "Inferences on the isotonic intensities of nonhomogeneous Poisson processes", International Conference on Applied Statistics, Actuarial Science and Financial Mathematics 2002, Hong Kong, 12/17/2002
Isakov, Victor	"The inverse problem of option pricing", International Conference on Inverse Problems, Hong Kong, China, January 2002
	"On uniqueness in the lateral Cauchy problem and on inverse problems for the dynamical Lamé system", INdAM Workshop, "Inverse Problems and Applications" Cortona, Italy, June 2002
	"Inverse Problems for quasilinear elliptic and parabolic equations and applications", AMS-UMI First Joint International Meeting, Pisa, Italy, June 2002.
Mukerjee, Hari	"Estimation of k stochastically ordered distributions", Institute of Mathematical Statistics Annual Meeting, Banff, Canada, July, 2002.
Wolf, Christian	"Measures of maximal dimension for hyperbolic diffeomorphisms," L. Barreira and C. Wolf, Dynamical Systems Conference, Kyoto, Japan, August 2002.

## Book Reviews Published in Professional Journals and Abstracts

Author	Title
Chopra, Dharam	"Basic statistical methods and models for the sciences," by J.Rosenblatt,Choice 39,2002:477
	"Sampling ( 2nd ed.)," Steven Thompson, Choice40 (2002): 965
	"The analysis and interpretation of multivariate data for social scientists,"Choice 40 (2002):338
	"Methods of Multivariate statistics", M.S.Srivastava,Choice 40(2002):834