

# Publications for 2007

## Refereed Article Publications

Author	Title
Alexandre Boukhgueim	(with G.V.Dyatlov and G.Uhlmann) "Unique continuation and controlability for hyperbolic equations with memory," <i>Journal of Inverse and Ill-Posed Problems</i> ,15(2007):587-598.
Dharam V. Chopra	(with R.M. Low and R. Dios) "Contributions to orthogonal arrays of strength six," <i>Congressus Numerantium</i> 186 (2007),193-198.
Dharam V. Chopra	(with M Bsharat) "On the constraints of some combinatorial arrays," <i>The Journal of Combinatorial Mathematics and Combinatorial Computing</i> 62 (2007),159-164.
Dharam V. Chopra	(with S.M. Lee) "On super-edge magic graphs which are weak magic," <i>The Journal of Combinatorial Mathematics and Combinatorial Computing</i> 62 (2007),177-187.
Thomas K. DeLillo	(with N. Benchama, T. Hrycak, and L. Wang) "A simplified Fornberg-like method for the conformal mapping of multiply-connected regions-Comparisons and crowding," <i>Journal of Computational and Applied Mathematics</i> , 209 (2007): 1-21.
Buma Fridman Daowei Ma	(with J-P Vigué) "Fixed Points and Determining Sets for Holomorphic Self-Maps of a Hyperbolic Manifold," <i>Michigan Math. Journal</i> , 55 (2007), 229-238.
Buma Fridman Daowei Ma	"Properties of Fixed Point Sets and a Characterization of the Ball in $\mathbb{C}^n$ ," <i>Proceedings of the American Math. Soc.</i> 135 (2007) 229-23.
Xiaomi Hu	"Asymptotical distributions, parameters and coverage probabilities of tolerance limits," <i>Computational Statistics and Data Analysis</i> , 51(9) 4753-4760
Xiaomi Hu	"Multivariate analysis without <i>vec</i> and $\square$ ," <i>The American Statistician</i> , 61(1) 64-66
Victor Isakov	"On uniqueness in the inverse conductivity problem with local data," <i>Inverse Problems and Imaging</i> , 1 (2007), 95-105.
Victor Isakov	"Increased stability in the continuation for the Helmholtz equation with variable coefficient," <i>AMS Contemp. Math.</i> ,426 (2007), 255-269.
Victor Isakov	"Increased stability in the Cauchy problem for some elliptic equations," <i>Instability in Models Connected with Fluid Flow</i> . Eds. C. Bardos, A. Fursikov, Intern. Math. Series, 6-7, Springer-Verlag, 2007, 337-360.
Victor Isakov	(with J.-N. Wang, M. Yamamoto) "An inverse problem for a dynamical Lamé system with residual stress," <i>Comm. Part. Diff. Equat.</i> , 32 (2007), 833-848.
Victor Isakov	(with D. Aralumallige Subbarayappa) "On increased stability in the continuation for the Helmholtz equation," <i>Inverse Problems</i> , 23 (2007), 1689-1697.
Victor Isakov	(with J.-N. Wang, M. Yamamoto) "An inverse problem for a dynamical Lamé system with residual stress," <i>SIAM J. Math. Anal.</i> , 39 (2007), 1328-1343.
Thalia D. Jeffres Kirk Lancaster	"Vertical Blow Ups of Capillary Surfaces in Part I: Convex Corners," <i>Electronic Journal of Differential Equations</i> , vol. 2007 (2007), No. 152, 1-24.
Chunsheng Ma	"Why is isotropy so prevalent in spatial statistics?" <i>Proceedings of the American Mathematical Society</i> , 135 (2007): 865-871.
Chunsheng Ma	"Planar-temporal stationary correlation models that depend on the maximum norm," <i>IEEE Transactions on Signal Processing</i> , 55 (2007): 889-896
Chunsheng Ma	"Stationary random fields in space and time with rational spectral densities," <i>IEEE Transactions on Information Theory</i> , 53 (2007): 1019-1029.
John Robertson	"Exceptional Dynamically Invariant Sections," <i>Journal of Dynamical Systems and Geometric Theories</i> , 5(2) 141-151.
Christian Wolf	(with L. Barreira) "Dimension and ergodic decompositions for hyperbolic flows," <i>Discrete and Continuous Dynamical Systems</i> 17 (2007), no. 1, 201-212.

**Christian Wolf** (with K. Gelfert) "Topological Pressure for one-dimensional holomorphic dynamical systems," Bulletin of the Polish Academy of Sciences. Mathematics 55 (2007), 53-62.

### **Published Conference Proceedings**

<b>Author</b>	<b>Title</b>
<b>Victor Isakov</b>	"The inverse conductivity problem with limited data and applications," "Inverse Problems in Applied Sciences-towards breakthrough," Journal of Physics: Conference Series 73(2007) 012011.
<b>Chunsheng Ma</b>	"Homogeneity, isotropy, and log-normality: Some thoughts on Kolmogorov's turbulence theory," Application of statistics to numerical models: new methods and case studies, May 21-24, 2007, The Institute for Mathematics Applied to Geosciences, National Center for Atmospheric Research (NCAR), Boulder, Colorado.
<b>Chunsheng Ma</b>	"Space-time downscaling of regional ozone forecasts with nonseparable covariance models," Transition workshop, Statistical and Applied Mathematical Science Institute (SAMSI), Research Triangle Park, North Carolina May 14-16, 2007.

### **Formal Papers Delivered at Professional Meetings**

<b>Author</b>	<b>Title</b>
<b>Dharam V. Chopra</b>	(with R.M. Low and R. Dios) "Investigations on orthogonal arrays of strength six," Thirty-Eighth Southeast International Conference on Combinatorics, Graph Theory, and Computing held in Boca Raton (FL), March 2007.
<b>Dharam V. Chopra</b>	(with R. Dios, S.M. Lee and S.M. Tong) "On super edge-magic deficiencies of join of graphs," Thirty-Eighth Southeast International Conference on Combinatorics, Graph Theory, and Computing held in Boca Raton (FL), March 2007.
<b>Dharam V. Chopra</b>	(with R.M. Low and R. Dios) "Further contributions to orthogonal arrays of strength six," Twenty-First Mid-West Conference on Combinatorics, Cryptography, and Computing held in Charleston (SC), October 2007.
<b>Dharam V. Chopra</b>	(with S.M. Lee and Hugo Sun) "On the Integer Magic Spectra of the Halin Graphs," Twenty-First MidWest Conference on Combinatorics, Cryptography, and Computing held in Charleston (SC), October 2007.
<b>Alan Elcrat</b>	Vortex Rings with swirl, APS/Fluids meeting, Salt Lake City, November 2007.
<b>Buma Fridman</b>	"Fixed point sets for holomorphic self-maps," invited paper at the conference held in the Stefan Banach International Mathematical Center in the Banach Center in Warsaw, Poland from 11 to 15 of June, 2007.
<b>Xiaomi Hu</b>	"Asymptotical distributions, parameters and coverage probabilities of tolerance limits," Statistics under one umbrella, Bielefeld, Germany, March 27-March 29, 2007.
<b>Victor Isakov</b>	"Carleman estimates and its applications to elasticity with residual stress," 23rd IFIP TC 7 Conference on System Modeling and Optimization, Cracow, Poland, July 2007
<b>Thalia D. Jeffres Kirk Lancaster</b>	"Capillarity in Containers with Corners," Special session in PDE's on Singular Domains, AMS meeting in Tucson, April 2007.
<b>John Robertson</b>	"Invariant Currents for Dynamical Systems," Spring Topology and Dynamics Conference 2007, Rolla, Missouri, March 2007

## **Book Reviews Published in Professional Journals and Abstracts**

### **Author**

### **Title**

**Dharam V. Chopra**

“Statistics for experimenters,” by G.E.P.Box,J.S.Hunter, and W.G.Hunter.Wiley Interscience.Choice 43 (6),2006,1045.

**Dharam V. Chopra**

“Discovering statistics using SPS,” (2nd.ed.) by Andy Field,Sage Publications.Choice 43(6),2006,1046.

**Dharam V. Chopra**

“Meta Mathematics: the quest for Omega,” by Gregory Chaitin, Pantheon Books. Choice 43(7),2006,1259.

**Dharam V. Chopra**

“Functional analysis for probability and stochastic processes: an introduction,” by A.Bobrowski, Cambridge University Press, Choice 43(8),2006,1437.

**Dharam V. Chopra**

“Understanding and using advanced statistics,” by J.Foster,E.Barkus and Yavorsky, Sage publications, Choice 43(10),2006,1859.

**Dharam V. Chopra**

“Introduction to non-parametric regression,” by K.Takezawa, Wiley-Interscience (2006). Choice 43(10),2006,1860-1861.