

# Publications for 2010

## Refereed Article Publications

Author	Title
Alexander Bukhgeym	(with E.V.Arbusov) "About solution of the Cauchy problem for elliptic equations on the plane with the help of integral Cauchy operator", Siberian Electronic Mathematical Reports, Vol. 7
Dharam V. Chopra	(with R.M. Low and R. Dios)."Contributions to Strength six balanced arrays using Holder and Minkowski inequalities", The Journal of combinatorial mathematics and combinatorial
Dharam V. Chopra	(with Richard M. Low,and R. Dios) "Further contributions to balanced arrays of strength four", The Journal of Combinatorial mathematics and Combinatorial Computing, Vol.74
Thomas K. DeLillo	(with E. H. Kropf) "Slit maps and Schwarz-Christoffel maps for multiply connected domains", Electronic Transactions on Numerical Analysis, 36 (2010), 195-223.
Alan Elcrat Ken Miller	(with Tenton Albrecht) "Steady vortex dipoles with general profile functions", The Journal of Fluid Mechanics, 2010.
Xiaomi Hu	(with Juren Hanshom) "A convergent algorithm for a generalized multivariate isotonic regression problem", Statistical Papers, 2010, online.
Victor Isakov	(with K. Kim, G. Nakamura) "Reconstruction of an unknown inclusion by thermography", Ann. Sc. Norm. Super. Pisa Cl Sci., 9 (2010), 725-758.
Victor Isakov Nanhee Kim	"Weak Carleman estimates with two large parameters and applications to elasticity with residual stress", Discr. Cont. Dyn. Syst. A, 27 (2010), 799-825.
Victor Isakov Deepak Aralumallige- Subbarayappa	"Increasing stability of the continuation for the Maxwell system", Inverse Problems, 26 (2010), 074005.
Thalia D. Jeffres	"Conformal Deformations of Conic Metrics to Constant Scalar Curvature", Math. Res. Lett., 17 (2010), no. 3, 449-465.
Kirk Lancaster	"A proof of the Concus-Finn conjecture", Pacific J. Math., 247 (2010), no. 1, 75-108.
Chunsheng Ma	"Elliptically contoured random fields in space and time", Journal of Physics A: Mathematical and Theoretical, vol. 43 (2010), 165206.
Chunsheng Ma	" $\chi^2$ random fields in space and time," IEEE Transactions on Signal Processing, vol. 58 (2010), 378-383.
Chunsheng Ma	(with H. Shu and X. Ma) "Isotropic random fields with the von Karman-whittle type correlation structure", Communications in Statistics -Theory and Methods, vol. 39 (2010), 3504-3512.
Hari Mukerjee	(with G. Malla) "A new piecewise esponential estimator of a survival function", Statistics and Probability Letters, 80 (2010), 1911-1917.
Hari Mukerjee	(with H. Elbarmi and M. Johnson) "Estimating the cumulative incidence functions when life distributions are constrained", J. Multivariate Analysis, 100 (2010), 594-603.

## Published Conference Proceedings

Author	Title
Alexander Bukhgeym	(with E.V.Arbutov) "About solution of the Cauchy problem for elliptic equations on the plane with the help of integral Cauchy operator", Proceedings of the first international scientific school-conference for young scientists, Theory and numerical methods for solving inverse and ill-posed problems, Vol. 7 Part 1 (2010), C173-C177.
Chunsheng Ma	"Extreme value analysis of Kansas temperature data", ESF-COST high-level research conference, Cambridge, UK, Dec. 13-17, 2010.
Chunsheng Ma	"An analysis of Kansas temperature data", Joint Research Conference on Statistics in Quality, Industry & Technology, Gaithersburg, Maryland, May 25-27, 2010.
Chunsheng Ma	"Vector random fields in space time with power law correlation structure", European Geosciences Union General Assembly 2010, Vienna, Austria, May 02-07, 2010.

## Formal Papers Delivered at Professional Meetings

Author	Title
Alexander Bukhgeym	"Inverse scattering problem in the two-dimensional case", Geometry, Topology, and Their Applications Seminar, Sobolev Institute of Mathematics, Novosibirsk, Russia, August 2010.
Dharam V. Chopra	(with R.M. Low and R.Dios) "On combinatorial arrays and their existence", Forty-First Southeast International Conference on Combinatorics, Graph Theory, and Computing, Boca Raton, FL, March 2010.
Dharam V. Chopra	(with R.M. Low and R.Dios) "On the existence of balanced arrays and the positive-semi-definiteness of the moment matrices", Twenty Fourth Mid-West Conference on Combinatorics, Cryptography, and Computing, Normal, IL, September 2010.
Thomas K. DeLillo	"The Schwarz-Christoffel Transformation for multiply connected Domains", Temple Univ. Math Dept Colloquium, 10/18/10.
Thomas K. DeLillo	"Fourier series methods for numerical conformal mapping of smooth domains", Applied Math. and Scientific Computing Seminar, Temple Univ., 10/20/10.
Alan Elcrat	"Vortices with general profile functions", Politecnico di Torino, June 14 2010.
Alan Elcrat	"Inverse problems in gravimetry", NGA Conference, Washington, DC, September 2010.
Xiaomi Hu	"On the test for the homogeneity of a parameter matrix with some rows constrained by synchronized order restrictions", 19th International Workshop on Matrices and Statistics, Shanghai, China, June 6, 2010.

<b>Victor Isakov</b>	“The Carleman estimates with the second large parameter and their applications”, International Workshop on Inverse Problems and Optimal Control WIPA-2010, Valparaiso, Chile, January 2010.
<b>Victor Isakov</b>	“The increasing stability in the continuation and inverse problems for Helmholtz type equations”, International Conference on Inverse Problems, Wuhan, China, April 2010.
<b>Victor Isakov</b>	“Carleman estimates with two large parameters and applications to elasticity with residual stress”, 8th AIMS Conference on Dynamical Systems, Differential Equations, and Applications, Dresden, Germany, May 2010.
<b>Victor Isakov</b>	“On identification of doping profile in semiconductors”, Meeting PDE's, Semigroup Theory, and Inverse Problems, Bologna, Italy, September 2010.
<b>Victor Isakov</b>	“Some Numerical Methods for Gravimetric Prospecting”, 28th IUGG Conference on Mathematical Geophysics CMG 2010, Pisa, Italy, June 2010.
<b>Thalia D. Jeffres</b>	“Gauss Curvature Flow on Surfaces of Evolution”, Colloquium, City College, April 15, 2010.
<b>Chunsheng Ma Tianshi Lu</b>	(with Qi Li) “A pair of stationary stochastic models with application to Temperature Data”, Energy, Climate and the Future: The Role of Kansas, 2010 Kansas Statewide EPSCoR Conference, Adams Alumni Center, University of Kansas , October 4, 2010.
<b>Chunsheng Ma</b>	(with Huabo Lu and Qi Li) “Minimum of daily low temperature comparison between 1973-1999 and 2000-2009”, Energy, Climate and the Future: The Role of Kansas, 2010 Kansas Statewide EPSCoR Conference, Adams Alumni Center, University of Kansas, October 4, 2010.
<b>Chunsheng Ma</b>	(with Huabo Lu and Qi Li) “Maximum of daily high temperature comparison between 1973-1999 and 2000-2009”, Energy, Climate and the Future: The Role of Kansas, 2010 Kansas Statewide EPSCoR Conference, Adams Alumni Center, University of Kansas , October 4, 2010.
<b>Daowei Ma</b>	“On singularity perturbation of Power Series”, International conference on singular perturbation theory and applications, Shanghai, China, June 2010.
<b>Hari Mukerjee</b>	(with H. Elbarmi) “Peakedness and peakedness ordering”, WNAR/IMS Regional Meeting, Seattle, WA, June 2010.

## Book Reviews Published in Professional Journals and Abstracts

<b>Author</b>	<b>Title</b>
<b>Alexander Bukhgeym</b>	“Some Tomography Problems on the Plane”, Workshop Inverse Transport Theory and Tomography, BIRS, May 2010. (Abstract)
<b>Dharam V. Chopra</b>	“Combinatorics: the Rota way”, by Joseph P.S.Kung, Choice, 47 no. 1 (2009), 153.

**Dharam V. Chopra**

“Graph theory and applications with exercises and problems”, by Jean-Claude Fournier, Choice 47 no. 4 (2009), 723.

**Dharam V. Chopra**

“Statistical modeling in R”, by Murray Aitkin et.al, Choice, 47 no. 5 (2010), 931.

**Dharam V. Chopra**

“Probability and Statistics: 5 questions”, ed. Alan Hajek and Vincent Hendricks, Choice, Vol.47 no. 10 (2010), 1964.