

Publications for 2014

Refereed Article Publications

Author	Title
Elizabeth Behrman	(with R.E.F. Bonde, J.E. Steck, and J.F. Behrman) “On the correction of anomalous phase oscillation in entanglement witnesses using quantum neural networks,” <i>IEEE-Transactions on Neural Networks and Learning Systems</i> 25, (2014), 1696-1703.
Dharam V. Chopra	(with Richard Low and R.Dios) “A note on discrete factorial designs of resolutions 5 and 7 and balanced arrays,” <i>Journal of Combinatorial Mathematics and Combinatorial Computing</i> , Vol.90 (2014), pp.159-165.
Dharam V. Chopra	(with Richard Low and R.Dios) “Investigations on balanced arrays of strength eight using coincidences and the moment matrix,” <i>Journal of Congressus Numerantium</i> Vol.213 (2013), pp.133-141. (not included in past report)
Dharam V. Chopra	(with Richard Low and R.Dios) “Further results on bi-level balanced arrays uszing coincidences,” <i>Journal of Combinatorial Mathematics and Combinatorial Computing</i> Vol.86 (2013), pp.171-181. (not included in past report)
Dharam V. Chopra	(with Richard Low and R.Dios) “Contributions to fractional factorial designs of resolutions six and eight for 2 ^m series and bi-level balanced arrays,” <i>Journal of Congressus Numerantium</i> Vol.215 (2013), pp.129-136. (not included in past report)
Jason W. Ferguson	(with Aaron Dotter, Charlie Conroy, A.P. Milone, A.F. Marino and David Yong) “Stellar models of multiple populations in globular clusters - I. The main sequence of NGC 6752,” 2015, <i>MNRAS</i> , 446, 1641.
Jason W. Ferguson	(with Don A. VandenBerg, Peter A. Bergbusch and Bengt Edvardsson) “Isochrones for Old (>5 Gyr) Stars and Stellar Populations. I. Models for $-2.4 \leq [Fe/H] \leq +0.6$, $0.25 \leq Y \leq 0.33$, and $-0.4 \leq [\alpha/Fe] \leq +0.4$ ” 2014, <i>ApJ</i> , 794, 72.
Buma Fridman Daowei Ma	“Holomorphic functions on subsets of C,” <i>Journal of the Mathematical Society of Japan</i> , vol. 65 (2013): 1-12.
Hussein H Hamdeh	(with Zein K. Heiba, Mohamed Maker Mohamed and M.A. Ahmed) “Structural Analysis and Cations Distribution of nanocrystalline Ni _{1-x} Zn _x Fe _{1.7} Ga _{0.3} O ₄ ,” <i>Journal of Metals and Compounds</i> , 618 (2015) 755-760, DOI 10.1016/j.jallcom.2014.08.241.
Hussein H Hamdeh	(with Venkat Ramana Rao Pendyala, Uschi M. Graham, Gary Jacobs and Burtron H. Davis) “Fischer-Tropsch synthesis: effect of potassium promoter loading over precipitated iron catalyst,” <i>Catalysis Letters</i> (2014) 144, 1704-1716, DOI: 10.1007/s10562-014-1336-z.

- Hussein H Hamdeh** (with Venkat Ramana Rao Pendyala, Gary Jacobs, Wilson D. Shafer, Dennis E. Sparks and Burtron H. Davis) “Fischer-Tropsch synthesis: effect of activation gas after varying Cu promoter loading over K-promoted Fe-based catalyst,” *Catalysis Letters*, (2014) 144, 1624-1635, DOI: 10.1007/s10562-014-1302-9.
- Hussein H Hamdeh** (with Venkat Ramana Rao Pendyala, Uschi Graham, Gary Jacobs and Burtron H. Davis) “Fischer-Tropsch synthesis: morphology, phase transformation and carbon layer growth of iron-based catalysts”, *ChemCatChem* (2014) 6, 1952-1960, DOI: 10.1002/cctc.201402073.
- Hussein H Hamdeh** (with M.H. Mahmoud, A.M. Elshahawy, and Salah A. Makhlof) “Synthesis of highly ordered 30 nm NiFe₂O₄ particles by microwave-combustion method,” *JMMM*, 369 (2014) 55-61, DOI:10.1016/j.jmmm.2014.06.011.
- Victor Isakov** (with S. Nagayasu, G. Uhlmann, and J.-N. Wang) “Increasing stability of the inverse boundary value problem for the Schroedinger equation,” *Contemp. Math.*, 615 (2014), 131-143.
- Victor Isakov** (with J. N. Wang) “Increasing stability for determining the potential in the Schroedinger equation with attenuation from the Dirichlet-to Neumann map,” *Inv. Probl. Imaging*, 8 (2014), 1139-1150.
- Victor Isakov** “Recovery of time dependent volatility coefficient by linearization,” *Evol. Equat. and Control Theory*, 3 (2014), 119-134.
- Victor Isakov** “On increasing stability in the Cauchy problem for general elliptic equations, in *New Prospect in Direct, Inverse, and Control Problems*,” A. Favini et al. (eds.). Springer INdAM Series, 10 (2014), 203-218.
- Chunsheng Ma** (with Renxiang Wang and Juan Du) “Covariance matrix functions of isotropic vector random fields, *Communications in Statistics: Theory and Methods*, 43 (2014), 2081-2093.
- Daowei Ma** (with G. Chen) “Complex Form of the Hardy-Titchmarsh-Watson Characterization of Fourier Kernels and Some of its Consequences,” *International J. Math. Anal.*, 7(2013), 3169—3190. (Did not report for 2013)
- Holger Meyer**
Nick Solomey (with J. Paley), “Measurement of charged pion production yields off the NuMI target,” *Phys. Rev. D*, 04 Aug 2014, Volume 90, eid 032001.
- Catherine Searle** (with F. Galaz-Garcia) “Non-negatively curved 5-manifolds of almost maximal symmetry rank,” *Geometry and Topology*, 18 (2014), pp. 1397—1435.
- Mark Walsh** “H-spaces, Loop spaces and the space of metrics of positive scalar curvature,” *Geometry and Topology*, 18 (2014), no. 4, 2189–2243.

Book Publications

Author	Title
Holger Meyer	(with M. Bozzo) “BEACH 2014 Proceedings of the 11th International Conference on Beauty, Charm and Hyperons in Hadronic Interactions” (submitted to publisher).

Reports

Author	Title
Alexander Bukhgeym	“Inversion formulas for elliptic inverse problems,” Abstracts of the 7th International Conference Inverse Problems: Modeling and Simulation, Fethiye, Turkey, May 26-31, 2014.

Published Conference Proceedings

Author	Title
Elizabeth Behrman	(with J.E. Steck) “Implementing learning for a quantum lattice gas computer,” 1st International Workshop on Artificial Intelligence and Machine Learning in Quantum Computing (AIMLQC), Pacific Rim International Conference on Artificial Intelligence (PRICAI) Gold Coast, Australia, December 5, 2014.
Hussein H Hamdeh	(with G.S.N. Rao, O.F. Caltun, P.S.V. Subba Rao, and B. Parvatheeswara Rao) “Influence of copper substitution on magnetostrictive properties of cobalt ferrite,” Digest Intermag, 2014.
Hussein H Hamdeh	(with G.S.N. Rao and B. Parvatheeswara Rao) “Mössbauer spectroscopic study of high magnetostrictive cobalt chromium ferrites for automobile torque sensors,” Procedia Materials Science 6, (2014), 1511-1515.
Nick Solomey	Editor of the BEACH 2014 International Conference on Hyperons, Charm and Beauty Hadrons Proceedings (submitted to publication).

Book Chapters and Publications in Anthologies

Author	Title
Catherine Searle	“An introduction to isometric group actions with applications to spaces with curvature bounded from below,” Geometry of Manifolds with Non-negative Sectional Curvature, Editors: R. Herrerra, L. Hernandez-Lamoneda, Lecture Notes in Mathematics 2110, Springer (2014): 21--44.
Tianshi Lu	“Wave propagation in bubbly fluids and cavitation mitigation,” Wave Propagation, Editor: Gomes Mateus, Academy Publish (2014): 309-332.

Formal Papers Delivered at Professional Meetings

Author	Title
Elizabeth Behrman	(with J.E. Steck) "Implementing learning for a quantum lattice gas computer," 1st International Workshop on Artificial Intelligence and Machine Learning in Quantum Computing (AIMLQC), Pacific Rim International Conference on Artificial Intelligence (PRICAI), Gold Coast, Australia, December 5, 2014.
Elizabeth Behrman	"Alice through the looking glass: an adventure into quantum computing," Tutorial on quantum mechanics and quantum computing, Pacific Rim International Conference on Artificial Intelligence (PRICAI), Gold Coast, Australia, December 5, 2014.
Hussein H Hamdeh	(with Muthu Kumaran Gnanamani, Dennis E Sparks and Burtron H Davis) "Fischer-Tropsch synthesis: activity and selectivity χ -Fe ₅ C ₂ and Θ -Fe ₃ C carbides," ACS National meeting 2014, San Francisco, CA, August 10-14, 2014.
Hussein H Hamdeh	(with G.S.N. Rao, O.F. Caltun, P.S.V. Subba Rao and B. Parvatheeswara Rao) "Influence of copper substitution on magnetostrictive properties of cobalt ferrite," InterMag 2014, Dresden, Germany, May 4-8, 2014.
Hussein H Hamdeh	(with G.S.N. Rao and B. Parvatheeswara Rao) "Mössbauer spectroscopic study of high magnetostrictive cobalt chromium ferrites for automobile torque sensors," 3rd International Conference on Materials processing and Characterization (ICMPC-2014), Griet, Hyderabad, India, March 8-9, 2014.
Victor Isakov	"On increasing stability for sources and coefficients from boundary data at larger frequencies," International Conference "PDE's, Inverse Problems, and Control Theory", Bologna, Italy, September 2014.
Catherine Searle	(with J. Harvey) "Orientation and Alexandrov spaces," Convergence of Metric Spaces Workshop, CUNY Graduate Center, New York, August, 2014.
Catherine Searle	(with F. Wilhelm) "How to lift positive Ricci curvature," Topology, Analysis, Geometry Seminar, University Notre Dame, April 29, 2014.
Catherine Searle	(with F. Wilhelm) "How to lift positive Ricci curvature, I," Geometry and Topology Seminar, Oregon State University, March 10, 2014.
Catherine Searle	(with F. Wilhelm) "How to lift positive Ricci curvature, II," Geometry and Topology Seminar, Oregon State University, March 3, 2014.
Catherine Searle	(with F. Wilhelm) "How to lift positive Ricci curvature," Geometry, PDEs Mathematical GR Seminar, University British Columbia, Vancouver, Canada, February 25, 2014.

Book Reviews Published in Professional Journals and Abstracts

Author	Title
Dharam V. Chopra	(edited by Xihong Lin, et.al.) “Past, Present, and Future of Statistical Science,” CRC Press, 2014. To appear in Choice Magazine.
Dharam V. Chopra	“Introduction to Mathematical Portfolio Theory,” by M. Joshi and Jane, Cambridge University Press, 2013. To appear in Choice Magazine.
Dharam V. Chopra	“Essential Statistical Inference (Theory and Methods),” by D. Boos, and L. Stefanski, Springer Verlag, 2013. To appear in Mathematical Reviews.