

Departmental List of Publications for the Year 2013

- [1] Ali Al-Sharadqah, Nikolai Chernov, and Qizhuo Huang. Errors-in-variables regression and the problem of moments. *Braz. J. Probab. Stat.*, 27(4):401–415, 2013.
- [2] R. AlAhmad and R. Weikard. On inverse problems for left-definite discrete Sturm-Liouville equations. *Oper. Matrices*, 7(1):35–70, 2013.
- [3] Mark S. Ashbaugh, Fritz Gesztesy, Marius Mitrea, Roman Shterenberg, and Gerald Teschl. A survey on the Krein–von Neumann extension, the corresponding abstract buckling problem, and Weyl-type spectral asymptotics for perturbed Krein Laplacians in nonsmooth domains. In *Mathematical physics, spectral theory and stochastic analysis*, volume 232 of *Oper. Theory Adv. Appl.*, pages 1–106. Birkhäuser/Springer Basel AG, Basel, 2013.
- [4] B. Bayar, N. Bouaynaya, and R. Shterenberg. Inference of genetic regulatory networks with unknown covariance structure. In *Genomic Signal Processing and Statistics (GENSIPS), 2013 IEEE International Workshop on*, pages 74–77, Nov 2013.
- [5] A. Blokh and K. Snider. Over-rotation numbers for unimodal maps. *J. Difference Equ. Appl.*, 19(7):1108–1132, 2013.
- [6] Alexander Blokh. Recurrent and periodic points in dendritic Julia sets. *Proc. Amer. Math. Soc.*, 141(10):3587–3599, 2013.
- [7] Alexander Blokh, Clinton Curry, and Lex Oversteegen. Cubic critical portraits and polynomials with wandering gaps. *Ergodic Theory Dynam. Systems*, 33(3):713–738, 2013.
- [8] Alexander Blokh, Clinton Curry, and Lex Oversteegen. Finitely Suslinian models for planar compacta with applications to Julia sets. *Proc. Amer. Math. Soc.*, 141(4):1437–1449, 2013.
- [9] Alexander M. Blokh, Robbert J. Fokkink, John C. Mayer, Lex G. Oversteegen, and E. D. Tymchatyn. Fixed point theorems for plane continua with applications. *Mem. Amer. Math. Soc.*, 224(1053):xiv+97, 2013.
- [10] Alexander M. Blokh, Debra Mimbs, Lex G. Oversteegen, and Kirsten I. S. Valkenburg. Laminations in the language of leaves. *Trans. Amer. Math. Soc.*, 365(10):5367–5391, 2013.
- [11] F. Bonetto, N. Chernov, A. Korepanov, and J. L. Lebowitz. Nonequilibrium stationary state of a current-carrying thermostated system. *EPL (Europhysics Letters)*, 102(1):15001, 2013.
- [12] Nidhal Bouaynaya, Roman Shterenberg, and Dan Schonfeld. Optimal perturbation control of general topology molecular networks. *IEEE Trans. Signal Process.*, 61(7):1733–1742, 2013.
- [13] Nidhal Bouaynaya, Roman Shterenberg, Dan Schonfeld, and Hassan M. Fathallah-Shaykh. Intervention and control of gene regulatory networks: Theoretical framework and application to human melanoma gene regulation. In

- Matthias Dehmer and Frank Emmert-Streib, editors, *Statistical Diagnostics for Cancer: Analyzing High-Dimensional Data*, pages 215–238. Wiley-Blackwell, 2013.
- [14] M. Brazell, N. Li, C. Navasca, and C. Tamon. Solving multilinear systems via tensor inversion. *SIAM J. Matrix Anal. Appl.*, 34(2):542–570, 2013.
- [15] N. Chernov, Q. Huang, and H. Ma. Is the best fitting curve always unique? *J. Math.*, pages Art. ID 753981, 5, 2013.
- [16] N. Chernov and S. Wijewickrema. Algorithms for projecting points onto conics. *J. Comput. Appl. Math.*, 251:8–21, 2013.
- [17] Nikolai Chernov, Hong-Kun Zhang, and Pengfei Zhang. Electrical current in Sinai billiards under general small forces. *J. Stat. Phys.*, 153(6):1065–1083, 2013.
- [18] Pierluigi Contucci, Sander Dommers, Cristian Giardinà, and Shannon Starr. Antiferromagnetic Potts model on the Erdős-Rényi random graph. *Comm. Math. Phys.*, 323(2):517–554, 2013.
- [19] Pierluigi Contucci, Emanuele Mingione, and Shannon Starr. Factorization properties in d -dimensional spin glasses. Rigorous results and some perspectives. *J. Stat. Phys.*, 151(5):809–829, 2013.
- [20] Clinton P. Curry, John C. Mayer, and E. D. Tymchatyn. Topology and measure of buried points in Julia sets. *Fund. Math.*, 222(1):1–17, 2013.
- [21] Fritz Gesztesy, Rudi Weikard, and Maxim Zinchenko. Initial value problems and Weyl-Titchmarsh theory for Schrödinger operators with operator-valued potentials. *Oper. Matrices*, 7(2):241–283, 2013.
- [22] Fritz Gesztesy, Rudi Weikard, and Maxim Zinchenko. On a class of model Hilbert spaces. *Discrete Contin. Dyn. Syst.*, 33(11-12):5067–5088, 2013.
- [23] Fritz Gesztesy, Rudi Weikard, and Maxim Zinchenko. On spectral theory for Schrödinger operators with operator-valued potentials. *J. Differential Equations*, 255(7):1784–1827, 2013.
- [24] L. C. Hoehn. An uncountable family of copies of a non-chainable tree-like continuum in the plane. *Proc. Amer. Math. Soc.*, 141(7):2543–2556, 2013.
- [25] Paul Jung and Greg Markowsky. Random walks at random times: convergence to iterated Lévy motion, fractional stable motions, and other self-similar processes. *Ann. Probab.*, 41(4):2682–2708, 2013.
- [26] Yulia Karpeshina and Young-Ran Lee. Spectral properties of a limit-periodic Schrödinger operator in dimension two. *J. Anal. Math.*, 120:1–84, 2013.
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- [28] Junfang Li. Evolution of eigenvalues along rescaled Ricci flow. *Canad. Math. Bull.*, 56(1):127–135, 2013.
- [29] Na Li, Philip Hopke, Kumar Pramod, Steven Smith, Yongjing Zhao, and Carmeliza Navasca. Source apportionment of time and size resolved ambient particulate matter. *J. Chemometrics and Intelligent Laboratory Systems*, 129:15–20, 2013.
- [30] Na Li, Stefan Kindermann, and Carmeliza Navasca. Some convergence results on the regularized alternating least-squares method for tensor decomposition. *Linear Algebra Appl.*, 438(2):796–812, 2013.

- [31] Carl Mueller and Shannon Starr. The length of the longest increasing subsequence of a random Mallows permutation. *J. Theoret. Probab.*, 26(2):514–540, 2013.
- [32] Bernadette Mullins, Patty Lofgren, Ruth Parker, Barry Spieler, Faye Clark, Rachel Cochran, Ann Dominick, Jason Fulmore, John Mayer, and Sherry Parrish. Challenging courses and curricula: A model for all students. *NCMS Journal of Mathematics Education Leadership*, 14:31–37, 2013.
- [33] Sergey Naboko, Roger Nichols, and Günter Stolz. Simplicity of eigenvalues in Anderson-type models. *Ark. Mat.*, 51(1):157–183, 2013.
- [34] Bruno Nachtergaele, Robert Sims, and Günter Stolz. An area law for the bipartite entanglement of disordered oscillator systems. *J. Math. Phys.*, 54(4):042110, 24, 2013.
- [35] R. G. Shterenberg and V. V. Sukhanov. The scattering problem for a fourth order ordinary differential operator on the half-line. I. The direct problem. *Algebra i Analiz*, 25(2):236–250, 2013.
- [36] Roman Shterenberg, Rudi Weikard, and Maxim Zinchenko. Stability for the inverse resonance problem for the CMV operator. In *Spectral analysis, differential equations and mathematical physics: a festschrift in honor of Fritz Gesztesy's 60th birthday*, volume 87 of *Proc. Sympos. Pure Math.*, pages 315–326. Amer. Math. Soc., Providence, RI, 2013.
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