

Departmental List of Publications for the Year 2006

BOOKS

- [1] J.J. Buckley. *Fuzzy Probability and Statistics*. Springer, 2006.
- [2] J.J. Buckley. *Fuzzy Statistics*. Wu-Nan Books, Taiwan, 2006. Chinese translation of Fuzzy Statistics, Springer, 2004.
- [3] N. Chernov and R. Markarian. *Chaotic billiards*. AMS, 2006.
- [4] Nikolai Chernov, Yulia Karpeshina, Ian W. Knowles, Roger T. Lewis, and Rudi Weikard, editors. *Recent advances in differential equations and mathematical physics*, volume 412 of *Contemporary Mathematics*. American Mathematical Society, Providence, RI, 2006. Papers from the 10th International Conference on Differential Equations and Mathematical Physics held at the University of Alabama at Birmingham, Birmingham, AL, March 29–April 2, 2005.

ARTICLES

- [1] Michael Aizenman, Alexander Elgart, Serguei Naboko, Jeffrey H. Schenker, and Gunter Stolz. Moment analysis for localization in random Schrödinger operators. *Invent. Math.*, 163(2):343–413, 2006.
- [2] Alexander Blokh, James M. Melaugh, John C. Mayer, Lex G. Oversteegen, and Daniel K. Parris. Rotational subsets of the circle under z^d . *Topology Appl.*, 153(10):1540–1570, 2006.
- [3] Alexander Blokh, Michał Misiurewicz, and Nándor Simányi. Rotation sets of billiards with one obstacle. *Comm. Math. Phys.*, 266(1):239–265, 2006.
- [4] Alexander Blokh and Lex Oversteegen. The Julia sets of quadratic Cremer polynomials. *Topology Appl.*, 153(15):3038–3050, 2006.
- [5] Alexander Blokh, Lex Oversteegen, and E. D. Tymchatyn. Applications of almost one-to-one maps. *Topology Appl.*, 153(10):1571–1585, 2006.
- [6] Alexander Blokh, Lex Oversteegen, and E. D. Tymchatyn. On almost one-to-one maps. *Trans. Amer. Math. Soc.*, 358(11):5003–5014 (electronic), 2006.
- [7] Anne Boutet de Monvel, Serguei Naboko, and Luis O. Silva. The asymptotic behavior of eigenvalues of a modified Jaynes-Cummings model. *Asymptot. Anal.*, 47(3-4):291–315, 2006.
- [8] James J. Buckley, Thomas Feuring, and Yoichi Hayashi. Fuzzy Markov chains. *J. Fuzzy Math.*, 14(3):723–737, 2006.
- [9] Andrea Catte, James C. Patterson, Martin K. Jones, W. Gray Jerome, Denys Bashtovyy, Zhengchang Su, Feifei Gu, Jianguo Chen, Marcela P. Aliste, Stephen C. Harvey, Ling Li, Gilbert Weinstein, and Jere P. Segrest. Novel changes in discoidal high density lipoprotein morphology: A molecular dynamics study. *Biophysical Journal*, 90(12):4345–4360, 2006.
- [10] N. Chernov. Advanced statistical properties of dispersing billiards. *J. Stat. Phys.*, 122(6):1061–1094, 2006.
- [11] N. Chernov. Regularity of local manifolds in dispersing billiards. *Math. Phys. Electron. J.*, 12:Paper 1, 54 pp. (electronic), 2006.
- [12] Douglas K. Childers, John C. Mayer, and James T. Rogers, Jr. Indecomposable continua and the Julia sets of polynomials. II. *Topology Appl.*, 153(10):1593–1602, 2006.
- [13] Douglas K. Childers, John C. Mayer, H. Murat Tuncali, and E. D. Tymchatyn. Indecomposable continua and the Julia sets of rational maps. In *Complex dynamics*, volume 396 of *Contemp. Math.*, pages 1–20. Amer. Math. Soc., Providence, RI, 2006.
- [14] David Damanik, Daniel Lenz, and Günter Stolz. Lower transport bounds for one-dimensional continuum Schrödinger operators. *Math. Ann.*, 336(2):361–389, 2006.
- [15] Fritz Gesztesy, Karl Unterkofler, and Rudi Weikard. An explicit characterization of Calogero-Moser systems. *Trans. Amer. Math. Soc.*, 358(2):603–656 (electronic), 2006.
- [16] Eman Hamza, Alain Joye, and Günter Stolz. Localization for random unitary operators. *Lett. Math. Phys.*, 75(3):255–272, 2006.
- [17] Yulia Karpeshina and Young-Ran Lee. On polyharmonic operators with limit-periodic potential in dimension two. *Electron. Res. Announc. Amer. Math. Soc.*, 12:113–120 (electronic), 2006.

- [18] Alexander V. Kiselev and Serguei N. Naboko. Nonsself-adjoint operators with almost Hermitian spectrum: matrix model. I. *J. Comput. Appl. Math.*, 194(1):115–130, 2006.
- [19] J. R. Morris and P. J. Rabier. Boundary value problems on the halfline without dichotomies. In *Proceedings of the Conference on Differential & Difference Equations and Applications*, pages 825–834. Hindawi Publishing Corporation, 2006.
- [20] Jason R. Morris. Nonautonomous semilinear parabolic equations on an infinite interval. *Dyn. Partial Differ. Equ.*, 3(3):209–233, 2006.
- [21] Jason R. Morris and Patrick J. Rabier. Riccati inequality and functional properties of differential operators on the half line. *J. Differential Equations*, 225(2):573–604, 2006.
- [22] Sergey N. Naboko and Michael Solomyak. On the absolutely continuous spectrum in a model of an irreversible quantum graph. *Proc. London Math. Soc. (3)*, 92(1):251–272, 2006.
- [23] Henghui Zou. A note on non-existence results for semi-linear cooperative elliptic systems via moving spheres. *Proc. Amer. Math. Soc.*, 134(6):1635–1646 (electronic), 2006.
- [24] Henghui Zou. A priori estimates and existence for strongly coupled semilinear cooperative elliptic systems. *Comm. Partial Differential Equations*, 31(4-6):735–773, 2006.