Departmental List of Publications for the Year 2002

[1] P. Bálint, N. Chernov, D. Szász, and I. P. Tóth. Multi-dimensional semi-dispersing billiards: singularities and the fundamental theorem. *Ann. Henri Poincaré*, 3(3):451–482, 2002.

[2] Christer Bennewitz and Yoshimi Saitō. An embedding norm and the Lindqvist trigonometric functions. *Electron. J. Differential Equations*, pages No. 86, 6 pp. (electronic), 2002.

[3] A. Blokh and G. Levin. An inequality for laminations, Julia sets and "growing trees". *Ergodic Theory Dynam. Systems*, 22(1):63–97, 2002.

[4] A. Blokh and G. Levin. On dynamics of vertices of locally connected polynomial Julia sets. *Proc. Amer. Math. Soc.*, 130(11):3219–3230 (electronic), 2002.

[5] Alexander Blokh and Adam Fieldsteel. Sets that force recurrence. *Proc. Amer. Math. Soc.*, 130(12):3571–3578 (electronic), 2002.

[6] Alexander Blokh and Michał Misiurewicz. Attractors for graph critical rational maps. *Trans. Amer. Math. Soc.*, 354(9):3639–3661 (electronic), 2002.

[7] B. M. Brown, R. A. Peacock, and R. Weikard. A local Borg-Marchenko theorem for complex potentials. *J. Comput. Appl. Math.*, 148(1):115–131, 2002. On the occasion of the 65th birthday of Professor Michael Eastham.

[8] J. J. Buckley and E. Eslami. Fuzzy Markov chains: uncertain probabilities. *Mathware Soft Comput.*, 9(1):33–41, 2002.

[9] James J. Buckley and Esfandiar Eslami. Crisp orderings of fuzzy numbers. In *Proceedings of the Third Seminar on Fuzzy Sets and its Applications (Zahedan, 2002)*, pages 55–58. Sistan Baluchestan Univ. Dept. Math., Zahedan, 2002.

[10] James J. Buckley and Esfandiar Eslami. Fuzzy ordering of fuzzy numbers. In *Proceedings of the Third Seminar on Fuzzy Sets and its Applications (Zahedan, 2002)*, pages 59–65. Sistan Baluchestan Univ. Dept. Math., Zahedan, 2002.

[11] James J. Buckley and Esfandiar Eslami. *An introduction to fuzzy logic and fuzzy sets*. Advances in Soft Computing. Physica-Verlag, Heidelberg, 2002.

[12] James J. Buckley, Esfandiar Eslami, and Thomas Feuring. *Fuzzy mathematics in economics and engineering*, volume 91 of *Studies in Fuzziness and Soft Computing*. Physica-Verlag, Heidelberg, 2002.

[13] James J. Buckley and Thomas Feuring. Fuzzy integral equations. *J. Fuzzy Math.*, 10(4):1011–1024, 2002.

[14] N. Chernov. Invariant measures for hyperbolic dynamical systems. In *Handbook of dynamical systems, Vol. 1A*, pages 321–407. North-Holland, Amsterdam, 2002.

[15] N. Chernov and J. L. Lebowitz. Dynamics of a massive piston in an ideal gas: oscillatory motion and approach to equilibrium. *J. Statist. Phys.*, 109(3-4):507–527, 2002. Special issue dedicated to J. Robert Dorfman on the occasion of his sixty-fifth birthday.

[16] N. Chernov, J. L. Lebowitz, and Ya. Sinai. Scaling dynamics of a massive piston in a cube filled with ideal gas: exact results. *J. Statist. Phys.*, 109(3-4):529–548, 2002. Special issue dedicated to J. Robert Dorfman on the occasion of his sixty-fifth birthday.

[17] David Damanik, Robert Sims, and Günter Stolz. Localization for one-dimensional, continuum, Bernoulli-Anderson models. *Duke Math. J.*, 114(1):59–100, 2002.

[18] David Damanik, Robert Sims, and Günter Stolz. Lyapunov exponents in continuum Bernoulli-Anderson models. In *Operator methods in ordinary and partial differential equations (Stockholm, 2000)*, volume 132 of *Oper. Theory Adv. Appl.*, pages 121–130. Birkhäuser, Basel, 2002.

[19] Robbert Fokkink and Lex Oversteegen. Homogeneous weak solenoids. *Trans. Amer. Math. Soc.*, 354(9):3743–3755 (electronic), 2002.

[20] J. Fröhlich, M. Griesemer, and B. Schlein. Asymptotic completeness for Rayleigh scattering. *Ann. Henri Poincaré*, 3(1):107–170, 2002.

[21] Yu. E. Karpeshina. On spectral properties of periodic polyharmomic matrix operators. *Proc. Indian Acad. Sci. Math. Sci.*, 112(1):117–130, 2002. Spectral and inverse spectral theory (Goa, 2000).

[22] Yu. E. Karpeshina. On the periodic magnetic Schrödinger operator in $\mathbf{R}^d$. Eigenvalues and model functions. In *Operator methods in ordinary and partial differential equations (Stockholm, 2000)*, volume 132 of *Oper. Theory Adv. Appl.*, pages 219–231. Birkhäuser, Basel, 2002.

[23] F. Khosropour, E. Eslami, and J. J. Buckley. Fuzzy vector analysis. *J. Fuzzy Math.*, 10(4):875–883, 2002.

[24] Ian Knowles and Aimin Yan. The recovery of an anisotropic conductivity in groundwater modelling. *Appl. Anal.*, 81(6):1347–1365, 2002.

[25] Ian W. Knowles. An inverse problem for Hamiltonian systems. *J. Comput. Appl. Math.*, 148(1):99–113, 2002. On the occasion of the 65th birthday of Professor Michael Eastham.

[26] L. Lebovits, Ya. Sinaĭ, and N. Chernov. Dynamics of a massive piston immersed in an ideal gas. *Uspekhi Mat. Nauk*, 57(6):3–86, 2002.

[27] Jason Lott and Günter Stolz. The spectral minimum for random displacement models. *J. Comput. Appl. Math.*, 148(1):133–146, 2002. On the occasion of the 65th birthday of Professor Michael Eastham.

[28] Sean MacDonald and Lex G. Oversteegen. On mappings which are not semi-conjugate to interval maps. *Houston J. Math.*, 28(4):807–813 (electronic), 2002.

[29] Andrew O. Maner. Cantor sets of ray composants in local Siegel disk boundaries. In *Continuum theory (Denton, TX, 1999)*, volume 230 of *Lecture Notes in Pure and Appl. Math.*, pages 191–209. Dekker, New York, 2002.

[30] Jean Mawhin and James R. Ward, Jr. Guiding-like functions for periodic or bounded solutions of ordinary differential equations. *Discrete Contin. Dyn. Syst.*, 8(1):39–54, 2002.

[31] James Serrin and Henghui Zou. Cauchy-Liouville and universal boundedness theorems for quasilinear elliptic equations and inequalities. *Acta Math.*, 189(1):79–142, 2002.

[32] Nándor Simányi. The complete hyperbolicity of cylindric billiards. *Ergodic Theory Dynam. Systems*, 22(1):281–302, 2002.

[33] Günter Stolz. Strategies in localization proofs for one-dimensional random Schrödinger operators. *Proc. Indian Acad. Sci. Math. Sci.*, 112(1):229–243, 2002. Spectral and inverse spectral theory (Goa, 2000).

[34] H. van den Bedem and N. Chernov. Expanding maps of an interval with holes. *Ergodic Theory Dynam. Systems*, 22(3):637–654, 2002.

[35] James Robert Ward, Jr. Periodic solutions of ordinary differential equations with bounded nonlinearities. *Topol. Methods Nonlinear Anal.*, 19(2):275–282, 2002.

[36] Rudi Weikard. On commuting matrix differential operators. *New York J. Math.*, 8:9–30 (electronic), 2002.

[37] Henghui Zou. A priori estimates for a semilinear elliptic system without variational structure and their applications. *Math. Ann.*, 323(4):713–735, 2002.