

List of publications Genadi Levin

Ph.D. Thesis

Title: “Bifurcations in one-dimensional dynamical systems with discrete time”

Supervisor: Prof. Victor I. Yudovich

Published partly in: [1]-[4]

Proceedings of Conferences

G. Levin, *Julia sets for polynomials and Pade approximations* (Russian). XIII Conference on operator theory. Theses of reports. Kuibyshev, 1988, 113–114.

G. Levin, *Adjoint equation for eigenvalues of a transfer operator on holomorphic repellers*. Israel Mathematical Conference Proceedings, v.11 (1997), 187–196.

G. Levin, *On maps that conjugate Feigenbaum’s dynamics*. Izvestiya Vishih Uchebnih Zavedenii: Matematika i Mehanika Splohnoi Sredi. Special issue devoted to 70-th birthday of Professor V. I. Yudovich, 2004, 159–163

G. Levin, *On the complex basin of real attractors*. Complex Dynamics 2003-2004, RIMS, Kokyuroku, Kyoto, Japan, no. 1447, 124-129.

Articles

1. Iu.S. Barkovskii and G. Levin, *On a limit Cantor set*, (Russian). Translation in Russian Math.Surveys 35 (1980), no. 2, 235—236.
2. G. Levin, *On non-regular values of the parameter of a polynomial family* (Russian). Translation in Russian Math.Surveys 36 (1981), no.6, 189–190.
3. G. Levin, *On successive bifurcations of one-parametric families of maps* (Russian). Translation in Russian Math.Surveys 37 (1982), no.3, 211–212.
4. G. Levin, *On a bifurcation set of parameters for the family of quadratic mappings* (Russian). Priblijennie metodi issledovaniya differencial’ nih uravnenii. Izd. Kuibyshev Univ., 1982, 103–109.
5. G. Levin, *On some sets of one-dimensional differential equations* (Russian). Priblijennie metodi issledovaniya differencial’nih uravnenii. Izd. Kuibyshev Univ., 1984, 94–98.
6. A.A. El’konjuk, G. Levin, *To the problem of separation of the material according to thickness* (Russian). Collection of works. Moscow, 1987, 93–101.
7. G. Levin, *On the arithmetic properties of a certain sequencs of polynomials* (Russian). Translation in Russian Math.Surveys 43 (1988), no.1, 245–246.

8. G. Levin, *Iterations of a polynomial, basis and Z-product operator* (Russian). Translation in Functional Anal. Appl. 23 (1989), no.1, 64–66.
9. G. Levin, *On bounds for multipliers of periodic points of holomorphic mappings* (Russian). Translation in Siberian Mathematical Journal, v.31, no.2 (1990), 273–278.
10. G. Levin, *On the theory of iterations of polynomial families in the complex plane* (Russian). Translation in Journal of Soviet Mathematics, v.52, no.6 (1990), 3512–3522.
11. G. Levin, *On symmetries on Julia sets* (Russian). Translation in Math. Notes, v.48, no.5-6 (1991), 1126–1131. *Letter to the Editor*, v.69, no.3 (2001).
12. A. Eremenko, G. Levin, *On periodic points of polynomial* (Russian). Translation in Ukrainian Math. J., no.11 (1990), 1258–1262.
13. G. Levin, *On Pommerenke's inequality for eigenvalues of fixed points*. Colloquium Mathematicum, v.LXII, fasc.1 (1991), 167–177.
14. A. Eremenko, G. Levin, *An estimate for characteristic exponents of a polynomial* (Russian). Function Theory, Functional Analysis, and their Applications (Kharkov), 58 (1993), 30–40.
15. G. Levin, M. Sodin, and P. Yuditskii, *A Ruelle operator for a real Julia set*. Commun. Math. Phys.141 (1991), 119–132.
16. G. Levin, M. Sodin, and P. Yuditskii, *Ruelle operator with rational weights for Julia sets*. Journal d'Analyse Mathématique 63 (1994), 304–331.
17. A. Eremenko, G. Levin, and M. Sodin, *On the distribution of zeros of the Ruelle zeta function*. Commun. Math. Phys. 159 (1994), 433–441.
18. G. Levin, *On the cross ratio of solutions of a first order scalar differential equation*. Bulletin of The London Mathematical Society 26 (1994), 295–296.
19. G. Levin, *On Mayer's conjecture and zeros of entire functions*. Ergodic Theory and Dynamical Systems 14 (1994), 565–574.
20. G. Levin, *On the complement of the Mandelbrot set*. Israel J. Math. 88 (1994), 189–212.
21. G. Levin, F. Przytycki, *External rays to periodic points*. Israel J. Math. 94 (1996).
22. G. Levin, F. Przytycki, *When do two rational functions have the same Julia set?* Proceedings of AMS (1997), v. 125, no. 7, 2179–2190.
23. G. Levin, *Disconnected Julia set and rotation sets*. Annales Scientifiques de L'Ecole Normale Supérieure 29 (1996), fasc.1, 1–22.
24. G. Levin, *On backward stability of holomorphic dynamical systems*. Fundamenta Math. 158 (1998), 97–107.

25. G. Levin, *Bounds for maps of an interval with one reflecting critical point, I*. Fundamenta Math. 157 (1998), 287–298.
26. G. Levin, S. van Strien, *Local connectivity of the Julia set of real polynomials*. Annals of Mathematics, 147 (1998), 471–541.
27. G. Levin, S. van Strien, *Total disconnectedness of the Julia set of real polynomials*. “Geometrie complexe et systemes dynamiques, colloque en l’honneur d’Adrien Douady, Orsay 1995”, M. Flexor, P. Sentenac et J.-C. Yoccoz, editeurs. Asterisque 261 (2000), 161–172.
28. G. Levin, S. van Strien, *Bounds for maps of an interval with one critical point of inflection type, II*. Inventiones Mathematicae 141 (2000) 2, 399–465.
29. A. Blokh, G. Levin, *An inequality for laminations, Julia sets and “growing trees”*. Ergodic Theory and Dynamical Systems 22 (2002), 1, 63–97.
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36. G. Levin, G. Świątek, *Thickness of Julia sets of Feigenbaum polynomials with high order critical points*. Comptes rendus de l’Académie des sciences- Mathematics, 339 (2004), no. 6, 421–424.
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38. G. Levin, G. Świątek, *Hausdorff dimension of Julia sets of Feigenbaum polynomials with high criticality*. Comm. Math. Phys. 258, 135–148, 2005.
39. G. Levin, *Multipliers of periodic orbits of quadratic polynomials and the parameter plane*. Israel J. Math, 170 (2009), 285–315.

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41. G. Levin, G. Świątek, *Measure of the Julia set of the Feigenbaum map with infinite criticality*. Ergodic Theory and Dynamical Systems, 30 (2010), 855-875
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47. G. Levin, *Addendum to: "Rigidity and non local connectivity of Julia sets of some quadratic polynomials"*, *Comm. Math. Phys.*, 305 (2011), 295-328. Comm. Math. Phys. 325 (2014), no.3, 1171-1178
48. G. Levin, A. Blokh, D. Childers, L. Oversteegen, D. Schleicher, *An extended Fatou-Shishikura inequality and wandering branch continua for polynomials*. To appear in Advances in Mathematics, 228 (2016) 1121-1174
49. G. Levin, F. Przytycki, W. Shen, *The Lyapunov exponent of holomorphic maps*, Inventiones Mathematicae, 2015 online, DOI: 10.1007/s00222-015-0637-1
50. G. Levin, G. Świątek, *Limit drift*, Ergodic Theory and Dynamical Systems. To appear.

Preprints

1. G. Levin, M. Sodin, *Polynomials with disconnected Julia sets and Green maps*. Preprint No.23 (1990/91), Hebrew University of Jerusalem, 1991.
2. G. Levin, *On relations between connected and disconnected Julia sets*. Preprint MPI/95-51, Max-Planck-Institut, Bonn, 1995.
3. G. Levin, A. Blokh, *Growing trees, laminations and the dynamics on the Julia set*. Preprint IHES/M/99/77, Orsay, 1999.

4. G. Levin *On the Laurent coefficients of the Riemann map for the complement of the Mandelbrot set*, arXiv:1401.5422