Publications and preprints

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: Matematica 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 issledovanija differencial' nih uravnenii. Izd. Kuibyshev Univ., 1982, 103–109.

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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.

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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.

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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.

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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.

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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 Superieure 29 (1996), fasc.1, 1–22.

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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.

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34. G. Levin, F. Przytycki, *On Hausdorff dimension of some Cantor attractors.* Israel J. Math., 149 (2005), 185-197.

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39. G. Levin, *Multipliers of periodic orbits of quadratic polynomials and the parameter plane.* Israel J. Math, 170 (2009), 285-315.

40. G. Levin, *Quasiconformal variation of multipliers.* Appendix to: Henk Bruin, Michael Jakobson, *New examples of topologically equivalent S-unimodal maps with different metric properties.* Geometric and Probabilistic Structures in Dynamics. Workshop in Honor of Michael Brin on the occasion of his 60th birthday, March 15-18, 2008, Uviversity of Maryland.

41. G. Levin, G. Swiatek, *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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49. G. Levin, F. Przytycki, W. Shen, *The Lyapunov exponent of holomorphic maps,* Inventiones Mathematicae, no 2, 205 (2016), 363-382

50. G. Levin, G. Swiatek, *Limit drift,* Ergodic Theory and Dynamical Systems 37 (2017), no 8, 2643-2670

51. G. Levin, G. Swiatek, *Limit drift for complex Feigenbaum mappings,* Ergodic Theory and Dynamical Systems. Published online September, 2020.

52. Genadi Levin, Weixiao Shen, Sebastian van Strien, *Transversality for critical relations of families of rational maps: an elementary proof.* In book: New Trends in One-Dimensional Dynamics, In Honour of Welington de Melo on the Occasion of His 70th Birthday IMPA 2016, Rio de Janeiro, Brazil, November 1417. Editors: Pacifico, Maria Jos, Guarino, Pablo. Springer Proceedings in Mathematics and Statistics, 2019

53. Genadi Levin, Weixiao Shen, Sebastian van Strien, *Positive transversality via transfer-operators and holomorphic motions withapplications to monotonicity for interval maps.* Nonlinearity, 33 (2020), 3970-4012

54. Genadi Levin, *On the Cauchy transform vanishing outside a compact.* Bulletin Polish Acad. Sci. Math. 68 (2020), 21-40.

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56. Genadi Levin, *Fixed points of the Ruelle-Thurston operator and the Cauchy transform.* Fundamenta Mathematicae, 254 (2021), 49-67.

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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

5. Genadi Levin, Weixiao Shen, Sebastian van Strien *Monotonicity of entropy and positively oriented transversality for families of interval maps*, arXiv:1611.10056

6. Genadi Levin, Feliks Przytycki, *On hyperbolic sets of polynomials*, arXiv:2107.11962

7. Genadi Levin, Feliks Przytycki, *On hyperbolic sets of polynomials*, in preparation