

List of Publications

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1. *Gerver, M. L. and Kudryavtseva, E. A.* (1995): A theorem on precedence relations generated by completely positive kernels. *Matem. Sbornik* **186** (N. 9), 19-44 (in Russian). *Transl. Sbornik Mathematics* **186** (N. 9), 1241-1269.
2. *Gerver, M. L. and Kudryavtseva, E. A.* (1996): On the solution set boundary in the travel-time inversion problem. *Dokl. Russian Acad. Sci. Earth Sci. Sect.* **346** (No. 5), 672-674 (in Russian). *Transl. Dokl. Russian Acad. Sci. Earth Sci. Sect.* **347** (N.2), 262-264.
3. *Gerver, M. L. and Kudryavtseva, E. A.* (1997): On extremal properties of waveguides with a finite number of layers in the hodograph inversion problem. *Dokl. Russian Acad. Sci. Earth Sci. Sect.* **356** (N. 1), 25-28 (in Russian).
4. *Gerver, M. L. and Kudryavtseva, E. A.* (1997): Universal sequence in the classical hodograph inversion problem. *Matem. Sbornik* **188** (N. 4), 3-56 (in Russian). *Transl. Sbornik Mathematics* **188** (N. 4), 483-536.
5. *Gerver, M. L. and Kudryavtseva, E. A.* (1997): A new proof of theorems on a universal sequence and extremal properties of discrete measures. *Uspekhi Matem. Nauk* **52**, N. 6(318), 153-154 (in Russian). *Transl. Russian Math. Surveys* **52**, no. 6, 1298-1299.
6. *Gerver, M. L. and Kudryavtseva, E. A.* (1998): Extremal properties of discrete measures, a universal sequence and the duality principle. *Mat. Sbornik* **189** (N. 11), 3-26 (in Russian). *Transl. Sb. Math.* **189** (no. 11-12), 1587-1610.
7. *Gerver, M. L. and Kudryavtseva, E. A.* (1998): On extremal properties of discrete measures and the duality principle. *Dokl. Russian Acad. Sci. Earth Sci. Sect.* **363** (No. 5), 586-589 (in Russian).
8. *Kudryavtseva, E. A.* (1998): Generalization of geometric Poincaré theorem for small perturbations. *Regular and Chaotic Dynamics* **3** (No. 2), 46-66.
9. *Kudryavtseva, E. A.* (1998): Stable invariants of conjugacy of Hamiltonian systems on two-dimensional surfaces. *Dokl. Acad. Nauk* **361** (N. 3), 314-317 (in Russian).
10. *Kudryavtseva, E. A.* (1998): Stable topological and smooth invariants for conjugacy of Hamiltonian systems on surfaces. In: *Topological methods in theory of Hamiltonian systems*. Eds. Fomenko, A.T. and Bolsinov, A.V. (Moscow: Factorial), 147-202 (in Russian).
11. *Brailov, Yu. A. and Kudryavtseva, E. A.* (1999): Stable topological nonconjugacy of Hamiltonian systems on two-dimensional surfaces. *Vestnik Moskov. Univ. Ser. I Mat. Mekh.* **No. 2**, 20-27, 72 (in Russian). *Transl. Moscow Univ. Math. Bull.* **54** (no. 2), 20-27.
12. *Kudryavtseva, E. A.* (1999): Realization of smooth functions on surfaces as height functions. *Matem. Sbornik* **190** (No. 3), 29-88 (in Russian). *Transl. Sbornik Mathematics* **190** (No. 3-4), 349-405.

13. *Kudryavtseva, E. A.* (1999): Periodic motions of a planetary system with double planets. The generalized Hill problem. *Vestnik Moskov. Univ. Ser. I Mat. Mekh.* **No. 4**, 59-61 (in Russian). *Transl. Moscow Univ. Math. Bull.* **54** (no. 4), 39-41.
14. *Kudryavtseva, E. A.* (1999): Reduction of Morse functions on surfaces to canonical form by smooth deformation. *Regular and Chaotic Dynamics* **4** (No. 3), 53-60.
15. *Kudryavtseva, E. A.* (1999): Canonical form of Reeb graph for Morse functions on surfaces. Inversion of 2-sphere in 3-space. *International Journal of Shape Modeling* **5** (No.1), 69-80.
16. *Hayat-Legrand, C., Kudryavtseva, E., Wang, S., and Zieschang, H.* (2001): Degrees of self-mappings of Seifert manifolds with finite fundamental groups. Dedicated to the memory of Marco Reni. *Rendiconti Istit. Mat. Univ. Trieste Supp.* **32**, 131-147.
17. *Gonçalves, D.L., Kudryavtseva, E., and Zieschang, H.* (2001): Intersection index of curves on surfaces and applications to quadratic equations in free groups. Dedicated to the memory of Professor M. Pezzana (Italian). *Atti Sem. Mat. Fis. Univ. Modena. Supp.* **IL**, 339-400.
18. *Gonçalves, D.L., Kudryavtseva, E., and Zieschang, H.* (2002): Roots of mappings on nonorientable surfaces and equations in free groups. *Manuscripta math.* **107** (no. 3), 311-341.
19. *Kudryavtseva, E., Weidmann, R., and Zieschang, H.* (2003): Quadratic equations in free groups and topological applications. Proceedings of the German-Korean Workshop, Pusan 2000. In: Group theory and low-dimensional topology. Eds. Mennike, J. and Jung Rae Cho. Research and exposition in mathematics **27**, 83-122.
20. *Bogatyri, S., Gonçalves, D.L., Kudryavtseva, E., and Zieschang, H.* (2003): On the Wecken property for the root problem of mappings between surfaces. *Moscow Math. J.* **3** (no. 4), 1223-1245.
21. *Bogatyri, S., Gonçalves, D.L., Kudryavtseva, E., and Zieschang, H.* (2003): Construction of branched coverings over closed surfaces following the Hurwitz approach. *Central Europ. J. of Math.* **2**, 184-197.
22. *Bogatyri, S., Gonçalves, D.L., Kudryavtseva, E., and Zieschang, H.* (2003): Minimal number of preimages under mappings between surfaces. *Matem. Zametki* (in Russian) **75**, 13-19.
23. *Bogopolski, O., Kudryavtseva, E., and Zieschang, H.* (2004): Simple curves on surfaces and an analog of a theorem of Magnus for surface groups. *Math. Z.* **247**, 595-609.
24. *Bogatyri, S., Gonçalves, D.L., Kudryavtseva, E., and Zieschang, H.* (2004): Realization of primitive branched coverings over closed surfaces. In: *Advances in Topological Quantum Field Theory*. Ed. Bryden, J.M. (Kluwer Academic Publishers), 297-316.
25. *Bogatyri, S.A., Kudryavtseva, E.A., and Zieschang, H.* (2004): On coincidence points of mappings of the torus into a surface. *Proc. Moscow Math. Inst. Steklov* **247**, 15-34.

26. Gonçalves, D.L., Kudryavtseva, E., and Zieschang, H. (2005): An algorithm for minimal number of intersection points of curves on surfaces. Proc. Seminar on Vector and Tensor Analysis **26**, 139-167.
27. Kudryavtseva, E.A., Saidak, F., and Zwengrowski, P. (2005): Riemann and his zeta function. Morfismos **9**, no. 2, 1-48.
28. Kudryavtseva, E.A. and Lakshtanov, E.L. (2006): Classification of singularities and bifurcations of critical points of even functions. In: Topological Methods in the Theory of Integrable Systems. Eds. Bolsinov, A.V., Fomenko, A.T., and Oshemkov, A.A.; Cambridge Scientific Publishers, Springer, 173-214.
29. Bogatyj, S.A., Fricke, J., and Kudryavtseva, E.A. (2007): On multiplicity of mappings between surfaces. In memory of H. Zieschang. G&T Monographs, Springer (to appear), 15 pages.
30. Gonçalves, D.L., Kudryavtseva, E., and Zieschang, H. (2007): Some quadratic equations in the free group of rank 2. In memory of H. Zieschang. G&T Monographs, Springer (to appear), 75 pages.

Published papers in Proceedings of Conferences

31. Gerver, M. L. and Kudryavtseva, E. A. (1994): Classification of permutations of converging series. In book: Tournir of Towns VII Summer Conference, Moscow: ITG, 20-25, 57-65 (in Russian).
32. Gerver, M. L. and Kudryavtseva, E. A. (1995): On the Boundary of the set of Solutions in travel Time Inversion and on Extremal Properties of Waveguides With a Finite Number of Layers. IUGG XXI General Assembly. Abstracts. Week B. Boulder, Colorado, July 2-14, 1995, p. B10 (UB31B-7).
33. Kudryavtseva, E. A. and Gerver, M. L. (1995): An Algorithm Yielding the Universal Sequence U in travel Time Inversion. IUGG XXI General Assembly. Abstracts. Week B. Boulder, Colorado, July 2-14, 1995, p. B11 (UB31B-13).
34. Kudryavtseva, E. A. and Nekhoroshev, N. N. (1998): Periodic orbits, survived after the deconstruction of families of such orbits under the perturbation of systems of ordinary differential equations. Theses. I.G.Petrovskii' seminar and Moscow Math. Soc. mutual XIX Assemby, Moscow, Jan. 20-24, 1998. Uspekhi mat. nauk **53** (No. 4), 206-207 (in Russian).