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Publications

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Research Papers

1. Ergodic actions of product groups, Pacific. J. Math. 20, 1977, 519 – 547.

2. An application of groupoid cohomology, Pacific J. Math. 91, 1980, 40 – 55.

3. The Rohlin tower theorem and hyperfiniteness for actions of continuous groups, Israel J. Math. 30, 1978, 99 – 122.

4. The Poincaré flow of a foliation, American J. Math. 102, 1978, 93 – 128.

5. Foliations of polynomial growth are hyperfinite, Israel J. Math. 34, 1979, 245 – 258.

6. (with R. Bowen) Markov maps associated with Fuchsian groups, IHES Publications 50, 1979, 153 – 170.

7. Symbolic dynamics for geodesic flows, Acta Math. 146, 1981, 103 – 128.

8. Coding geodesics with continued fractions, L'Enseignement Math. 29, 1981, 67 – 76.

9. A problem in ergodic theory, Bull. London Math. Soc. 14, 1982, 28 – 29.

10. The infinite word problem and limit sets in Fuchsian groups, Ergodic Theory and Dynam. Systems 1, 1981, 337 – 360.

11. Martin boundaries of random walks on Fuchsian groups, Israel J. Math. 44, 1983, 221 – 240.

12. (with R. Brooks) Bounded cohomology for surface groups, Topology 23, 1984, 29 – 36.

13. Non Euclidean geometry, continued fractions and ergodic theory, Math. Intelligencer 4, 1982, 24 – 31.

14. (with J. Birman) Geodesics with bounded intersection number on surfaces are sparsely distributed, Topology 24, 1985, 217 – 227.

15. (with J. Birman) An algorithm for simple curves on surfaces, J. London Math. Soc. 2, 29, 1984, 331 – 342.

16. The modular surface and continued fractions, J. London Math. Soc. 2, 31, 1985, 69 – 85.

17. The Geometry of Markoff Numbers, Math. Intelligencer 7, 1985, 20 – 29.

18. (with J. Birman) Geodesics with multiple self-intersections and symmetries on Riemann surfaces, in *Low dimensional topology and Kleinian groups*, D. Epstein ed., LMS Lecture Notes 112, Cambridge Univ. Press 1986, 3 – 12.

19. (with J. Birman) Dehn's algorithm revisited, with application to simple curves on surfaces, in *Combinatorial Group Theory and Topology*, S. Gersten and J. Stallings eds., Ann. of Math. Studies III, Princeton Univ. Press 1987, 451 – 478.

20. Geometrical Markov coding of geodesics on surfaces of constant negative curvature, Ergodic Theory and Dynam. Systems 6, 1986, 601 – 625.

21. (with J. Birman) Algebraic Linearity for an automorphism of a surface group, J. of Pure and Applied Algebra 52, 1988, 227 – 275.

22. (with A. Haas) The Hurwitz constant and Diophantine approximation on Hecke groups, J. London Math. Soc. 2, 34, 1986, 219 – 334.

23. The Markoff spectrum in the Hecke group G_5, J. London Math. Soc. 57, 1988, 151 – 181.

24. Symbolic dynamics for geodesic flows, Proc. International Congress Math., Berkeley 1986, Vol. II, 1210 – 1215.

25. Some classical examples of chaotic dynamics, Proc. Roy. Soc. A413, 1987, 171 – 182.

26. Symbolic dynamics and diophantine approximation, in *Number Theory and Dynamical Systems*, M. Dodson and J. Vickers eds., LMS Lecture Notes 134, 1989, 49 – 67.

27. The growth function of a Fuchsian group, Papers presented to E.C. Zeeman, Warwick 1988, 281 – 291.

28. (with Ya. G. Sinai) Ising models on the Lobachevsky plane, Comm. Math. Phys. 128, 1990, 63 – 76.

29. Geometrical methods of symbolic coding, in *Ergodic Theory and Symbolic Dynamics in Hyperbolic Spaces*, T. Bedford, M. Keane and C. Series eds., Oxford Univ. Press 1991, 125 – 151.

30. Lectures on pleating coordinates for the Maskit embedding of the punctured torus, in *Proc. 4th workshop on Math. Physics*, Dong Pyo Chi ed., Korean Academic Council, Seoul 1992, 115 – 146.

31.] (with L. Keen) Pleating coordinates for punctured tori. Bull. American Math. Soc. 26, 1992, 141 – 146.

32. (with L. Keen) Pleating Coordinates for the Maskit embedding of the Teichmüller space of punctured tori, Topology 32, 1993, 719 – 749.

33. (with L. Keen and B. Maskit) Geometric finiteness and uniqueness for groups with circle packing limit sets. J. reine und angew. Mathematik 436, 1993, 209 – 219.

34. (with L. Keen) The Riley slice of Schottky space. Proc. London Math. Soc. 69, 1994, 72 – 90.

35. (with L. Keen) Continuity of convex hull boundaries, Pacific J. Math. 168, 1995, 183 – 206.

36. (With J. Parker) Bending formulae for convex hull boundaries, J. d'Analyse Math. 67, 165 – 198, 1995.

37. (With L. Keen) How to bend pairs of punctured tori, in *Lipa's Legacy*, J. Dodziuk and L. Keen eds, Contemporary Math. 211, 1997, 359 – 387.

38. (With L. Keen and J. Parker) Combinatorics of simple closed curves on the twice punctured torus, Israel J. Math. 112, 1999, 29 – 60.

39. (With Y. Komori) The Riley slice revisited, in *The Epstein Birthday Schrift*, I. Rivin, C. Rourke and C. Series eds., Geom. and Top. Monographs, Vol.1, International Press 1999, 303 – 316.

40. Lectures on pleating coordinates for once punctured tori, in *Hyperbolic spaces and related topics*, Kokyuroku 1104, Research Inst. Math. Sci. Kyoto 1999, 30 – 108.

41. An extension of Wolpert's derivative formula, Pacific J. Math. 197, 2001, 223 – 239.

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45. Why is there hyperbolic geometry in dynamics? in *European Women in Maths., Proceedings of the Tenth General Meeting*, E. Mezzetti and S. Paycha eds., World Scientific 2003, 191 – 208.

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47. (With L. Keen) Pleating invariants for punctured torus groups, Topology 43, 2004, 447 – 491.

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49. Limits of quasifuchsian groups with small bending, Duke Mathematical J. 128, 2005, 285 – 329.

50. A crash course on Kleinian groups, Rend. Istit. Mat. Univ. Trieste XXXVII, 2005, 1 – 38.

51. (With Y. Choi) Lengths are coordinates for convex structures, J. Diff. Geom. 73, 2006, 75 – 116.

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53. (With Y. Choi and K. Rafi) Lines of minima and Teichmüller geodesics, GAFA, 18, 2008, 698 – 754.

54. (With Y. Choi and K. Rafi) Lines of minima are uniformly quasigeodesic, Pacific J. Math. 237, 2008, 21 – 44.

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58. (With A.Bufetov) A pointwise ergodic theorem for Fuchsian groups. Math. Proc. Cam Phil. Soc, 151, 2011, 145 – 159.

59. (With M.Mj) Limits of limit sets I. Geometriae Dedicata, 167, 2013, 35 – 67.

60. (With M.Mj) Limits of limit sets II. Geometry and Topology, 21, 2017, 647 – 692.

61. (with S.P. Tan and Y. Yamashita) The diagonal slice of Schottky space. Algebraic and Geometric Topology, 17, 2017, 2239 – 2282.

62. (with Alexander I. Bufetov, Alexey Klimenko) Convergence of spherical averages for actions of Fuchsian Groups. `arXiv:1805.11743`.

63. Primitive stability and Bowditch's BQ-condition are equivalent. `arXiv:1901.01396`.

Books

1. *Ergodic Theory and Symbolic Dynamics in Hyperbolic Spaces.* Oxford Univ. Press 1991. Editors T. Bedford, M. Keane and C. Series.

2. *The Epstein Birthday Schrift.* Geometry and Topology Monographs, Vol.1, International Press 1999. Editors I. Rivin, C. Rourke and C. Series.

3. (With D. Mumford and D. Wright) *Indra's Pearls.* Cambridge Univ. Press 2002.

4. *Kleinian Groups and Hyperbolic 3-manifolds.* LMS Lecture Notes 299, Cambridge Univ. Press 2003. Editors Y. Komori, V. Markovic and C. Series.

5. *Spaces of Kleinian Groups.* LMS Lecture Notes 329, Cambridge Univ. Press 2006. Editors Y. Minsky, M. Sakuma and C. Series.

6. *Geometry, Topology & Dynamics of Character Varieties.* Lecture Note Series Vol. 23, Inst. for Math. Sciences, National Univ. of Singapore, World Scientific 2012. Editors W. Goldman, S. P. Tan, C. Series.

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Popular and General

1. Review of *L. Fox, The problem of women and mathematics*, Math Intelligencer 5,(1983), 52-3.

2. How to make a pseudosphere, Manifold, 1988.

3. Non-Euclidean Kaleidoscopes, Interdisciplinary Science Reviews, 15, 1989, 224-234.

4. (with M. Losada) Reflections on first and third world relations, CSWP Gazette, 9, 1989, 1-3.

5. Fractals, Reflections and Distortions, New Scientist, No. 1735, Sept. 1990, 54-58; Reprinted in the Penguin Book of Chaos; (translated into Japanese).

   Extract reprinted in The Faber Book of Science, Ed. John Carey, Faber and Faber 1995.

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10. Contribution to *George Mackey, 1916 – 2006*, AMS Notices, Vol. 54 No 7, August 2007.

11. (with David Wright) Non-Euclidean Symmetry and Indra's Pearls, in *Bridges London*, eds. R Sarhangi and J Sharp, Tarquin publications, 25 – 32, 2006.

12. Interview in *Mathematics Today*, February 2007.

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14. Milestones on a non-Euclidean journey, in *Visions of Mathematics*, ed. S Parc, Oxford Univ. Press , 2014.

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