

CAROLINE SERIES  
LIST OF 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, *Publications mathématiques de l’IHÉS* **50** (1979), 153 – 170.
7. Symbolic dynamics for geodesic flows, *Acta Mathematica* **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 Dynamical 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.* **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(3)**, (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 Dynamical 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 of Mathematics, Berkeley, Vol. II* (1986), 1210 – 1215.
25. Some classical examples of chaotic dynamics, *Proc. Royal Society A* **413** (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, *Communications in Mathematical Physics* **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** (1995), 165 – 198.
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., *Geometry and Topology Monographs*, Vol.1 (1999), International Press, 303 – 316.
40. Lectures on pleating coordinates for once punctured tori, in *Hyperbolic spaces and related topics*, *Kokyuroku* **1104** (1999), Research Inst. Math. Sci. Kyoto, 30 – 108.
41. An extension of Wolpert's derivative formula, *Pacific J. Math.* **197** (2001), 223 – 239.
42. On Kerckhoff minima and pleating varieties for quasifuchsian groups, *Geometriae Dedicata* **88** (2001), 211 – 237.
43. (with Y. Komori) Pleating coordinates for the Earle embedding, *Ann. Fac. des Sciences de Toulouse Vol. X* (2001), 69 – 105.
44. (with R. Díaz) Examples of pleating varieties for twice punctured tori, *Trans. Amer. Math. Soc.* **356** (2003), 621 – 658.
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.
46. (with R. Díaz) Limit points of lines of minima in Thurston's boundary of Teichmüller space, *Algebraic and Geometric Topology* **3** (2003), 207 – 234.
47. (with L. Keen) Pleating invariants for punctured torus groups, *Topology* **43** (2004), 447 – 491.
48. (with J. Parker) The mapping class group of the twice punctured torus, in *Groups: Topological, Combinatorial and Arithmetic Aspects*, T. Müller ed., *LMS Lecture Notes* **311** (2004), 405 – 486.
49. Limits of quasifuchsian groups with small bending, *Duke Mathematical Journal* **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, *Journal of Differential Geometry* **73** (2006), 75 – 116.

52. Thurston's bending measure conjecture for once punctured torus groups, in *Spaces of Kleinian Groups*, Y. Minsky, M. Sakuma and C. Series eds., LMS Lecture Notes **329** (2006), 75 – 90.
53. (with Y. Choi and K. Rafi) Lines of minima and Teichmüller geodesics, *Geometric and Functional Analysis* **18** (2008), 698 – 754.
54. (with Y. Choi and K. Rafi) Lines of minima are uniformly quasi-geodesic. *Pacific J. Math.* **237** (2008), 21 – 44.
55. The Maskit embedding for the twice punctured torus, *Geometry & Topology* **14** (2010), 1941 – 1991.
56. Lines of minima in Teichmüller space, in *Handbook of Teichmüller theory* Vol. **III** (2012), A. Papdopoulos ed., EMS Publishing House, 123 – 156.
57. (with S. Maloni) Top terms of trace polynomials in Kra's plumbing construction, *Algebraic and Geometric Topology* **10** (2010), 1565 – 1608.
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: Geometrically Infinite Groups, submitted to *Geometry and Topology* 2013, at <http://arxiv.org/abs/1306.3081> (43 pages)
61. (with S.P. Tan and Y. Yamashita) The diagonal slice of Schottky space. Submitted 2014, at <http://arxiv.org/abs/1409.6863>. (44 pages)

### Books and Conference Proceedings

- A1. *Ergodic Theory and Symbolic Dynamics in Hyperbolic Spaces*, Oxford University Press 1991. Editors T. Bedford, M. Keane and C. Series.
- A2. *The Epstein Birthday Schrift*, *Geometry and Topology Monographs* Vol. **1** (1999), International Press. Editors I. Rivin, C. Rourke and C. Series.
- A3. (with D. Mumford and D. Wright) *Indra's Pearls*, Cambridge University Press 2002. Russian translation (2011) and Japanese translation (2012).
- A4. *Kleinian Groups and Hyperbolic 3-manifolds*, LMS Lecture Notes **299** (2003), Cambridge University Press. Editors Y. Komori, V. Markovic and C. Series.
- A5. *Spaces of Kleinian Groups*. LMS Lecture Notes **329** (2006), Cambridge University Press. Editors Y. Minsky, M. Sakuma and C. Series.
- A6. *Geometry, Topology and Dynamics of Character Varieties*, Lecture Note Series **23** (2012), Inst. for Math. Sciences, National University of Singapore, World Scientific. Editors W. Goldman, S. P. Tan and C. Series.  
<http://www.worldscientific.com/worldscibooks/10.1142/8445>

## 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.
6. British Women Mathematicians: 200 years of history. Oxford High School Birthday lecture volume, Dec 1996 (14 pages) .
7. And what became of the Women?, *Mathematical Spectrum*, 30, 1997/8, 49-52.
8. On the way to chaos theory, Obituary, Dame Mary Cartwright, *The Guardian*, April 9, 1998; reprinted in *European Maths. Soc. Newsletter*, Dec. 1998, 21 – 23.
9. Oxford Dictionary of National Biography entry for Dame Mary Cartwright, 2004.
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.
13. (with David Wright) Non-Euclidean geometry and Indra's pearls, in +plus online magazine Issue 43, June 2007.
14. Milestones on a non-Euclidean journey, in *Visions of Mathematics*, ed. S Parc, Oxford Univ. Press , 2014.

## Book Reviews

1. H. Zieschang, Finite groups of mapping classes of surfaces, *Lecture notes in Math*, 875, reviewed in *Bull London Math Soc*, 14(1982) 444.
2. L. Fox, *The problem of women and mathematics*, reviewed in *Math Intelligencer* 5,(1983), 52-3.
3. J. Gray, *Linear Differential equations and group theory from Riemann to Poincare*, reviewed in *British Journal for History of Science*, 21 (1988), 112-114.
4. P. Nicholls, *The ergodic theory of discrete groups*, reviewed in *Ergodic theory and dynamical systems* 10 (1990), 407-9.

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