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PUBLICATIONS

[1] C. J. Bishop and J. K. Wetterer Planktivore prey selection: the relative field volume model vs. the apparent size model. *Ecology*, 66(2):457, 1985.

[2] C. J. Bishop. A counterexample in conformal welding concerning Hausdorff dimension. *Michigan Math. J.*, 35(1):151–159, 1988.

[3] C. J. Bishop. An element of the disk-algebra that is stationary on a set of positive length. *Algebra i Analiz*, 1(3):83–88, 1989.

[4] C. J. Bishop. Constructing continuous functions holomorphic off a curve. *J. Funct. Anal.*, 82(1):113–137, 1989.

[5] C. J. Bishop. Approximating continuous functions by holomorphic and harmonic functions. *Trans. Amer. Math. Soc.*, 311(2):781–811, 1989.

[6] C. J. Bishop, L. Carleson, J. B. Garnett, and P. W. Jones. Harmonic measures supported on curves. *Pacific J. Math.*, 138(2):233–236, 1989.

[7] C. J. Bishop. Bounded functions in the little Bloch space. *Pacific J. Math.*, 142(2):209–225, 1990.

[8] C. J. Bishop. Conformal welding of rectifiable curves. *Math. Scand.*, 67(1):61–72, 1990.

[9] C. J. Bishop and P. W. Jones. Harmonic measure and arclength. *Ann. of Math. (2)*, 132(3):511–547, 1990.

[10] C. J. Bishop and T. Steger. Three rigidity criteria for $\mathrm{PSL}(2, \mathbf{R})$. *Bull. Amer. Math. Soc. (N.S.)*, 24(1):117–123, 1991.

[11] C. J. Bishop. A characterization of Poissonian domains. *Ark. Mat.*, 29(1):1–24, 1991.

[12] C. J. Bishop. Brownian motion in Denjoy domains. *Ann. Probab.*, 20(2):631–651, 1992.

[13] C. J. Bishop. Some questions concerning harmonic measure. In *Partial differential equations with minimal smoothness and applications (Chicago, IL, 1990)*, volume 42 of *IMA Vol. Math. Appl.*, pages 89–97. Springer, New York, 1992.

[14] C. J. Bishop and T. Steger. Representation-theoretic rigidity in $\mathrm{PSL}(2, \mathbf{R})$. *Acta Math.*, 170(1):121–149, 1993.

[15] C. J. Bishop. An indestructible Blaschke product in the little Bloch space. *Publ. Mat.*, 37(1):95–109, 1993.

[16] C. J. Bishop. How geodesics approach the boundary in a simply connected domain. *J. Anal. Math.*, 64:291–325, 1994.

[17] C. J. Bishop and P. W. Jones. Harmonic measure, L^2 estimates and the Schwarzian derivative. *J. Anal. Math.*, 62:77–113, 1994.

[18] C. J. Bishop. Some homeomorphisms of the sphere conformal off a curve. *Ann. Acad. Sci. Fenn. Ser. A I Math.*, 19(2):323–338, 1994.

[19] C. J. Bishop. A counterexample concerning smooth approximation. *Proc. Amer. Math. Soc.*, 124(10):3131–3134, 1996.

[20] C. J. Bishop. A distance formula for algebras on the disk. *Pacific J. Math.*, 174(1):1–27, 1996.

[21] C. J. Bishop. Minkowski dimension and the Poincaré exponent. *Michigan Math. J.*, 43(2):231–246, 1996.

[22] C. J. Bishop. On a theorem of Beardon and Maskit. *Ann. Acad. Sci. Fenn. Math.*, 21(2):383–388, 1996.

[23] C. J. Bishop. Some characterizations of $C(\mathcal{M})$. *Proc. Amer. Math. Soc.*, 124(9):2695–2701, 1996.

[24] C. J. Bishop. Geometric exponents and Kleinian groups. *Invent. Math.*, 127(1):33–50, 1997.

[25] C. J. Bishop and Y. Peres. Packing dimension and Cartesian products. *Trans. Amer. Math. Soc.*, 348(11):4433–4445, 1996.

[26] C. J. Bishop and Peter W. Jones. Hausdorff dimension and Kleinian groups. *Acta Math.*, 179(1):1–39, 1997.

[27] C. J. Bishop and P. W. Jones. The law of the iterated logarithm for Kleinian groups. In *Lipa's legacy (New York, 1995)*, volume 211 of *Contemp. Math.*, pages 17–50. Amer. Math. Soc., Providence, RI, 1997.

[28] C. J. Bishop and P. W. Jones. Wiggly sets and limit sets. *Ark. Mat.*, 35(2):201–224, 1997.

[29] C. J. Bishop, P. W. Jones, Robin Pemantle, and Yuval Peres. The dimension of the Brownian frontier is greater than 1. *J. Funct. Anal.*, 143(2):309–336, 1997.

[30] C. J. Bishop. Quasiconformal mappings which increase dimension. *Ann. Acad. Sci. Fenn. Math.*, 24(2):397–407, 1999.

[31] C. J. Bishop. A quasisymmetric surface with no rectifiable curves. *Proc. Amer. Math. Soc.*, 127(7):2035–2040, 1999.

[32] C. J. Bishop, A. Böttcher, Yu. I. Karlovich, and I. Spitkovsky. Local spectra and index of singular integral operators with piecewise continuous coefficients on composed curves. *Math. Nachr.*, 206:5–83, 1999.

[33] C. J. Bishop and J. T. Tyson. Conformal dimension of the antenna set. *Proc. Amer. Math. Soc.*, 129(12):3631–3636, 2001.

[34] C. J. Bishop and J. T. Tyson. Locally minimal sets for conformal dimension. *Ann. Acad. Sci. Fenn. Math.*, 26(2):361–373, 2001.

[35] C. J. Bishop. Bi-Lipschitz homogeneous curves in $\mathbb{R}^2$ are quasicircles. *Trans. Amer. Math. Soc.*, 353(7):2655–2663 (electronic), 2001.

[36] C. J. Bishop. Divergence groups have the Bowen property. *Ann. of Math. (2)*, 154(1):205–217, 2001.

[37] C. J. Bishop. BiLipschitz approximations of quasiconformal maps. *Ann. Acad. Sci. Fenn. Math.*, 27(1):97–108, 2002.

[38] C. J. Bishop. Quasiconformal mappings of Y-pieces. *Rev. Mat. Iberoamericana*, 18(3):627–652, 2002.

[39] C. J. Bishop. Non-rectifiable limit sets of dimension one. *Rev. Mat. Iberoamericana*, 18(3):653–684, 2002.

[40] C. J. Bishop and P. W. Jones. Compact deformations of Fuchsian groups. *J. Anal. Math.*, 87:5–36, 2002. Dedicated to the memory of Thomas H. Wolff.

[41] C. J. Bishop. Quasiconformal Lipschitz maps, Sullivan's convex hull theorem and Brennan's conjecture. *Ark. Mat.*, 40(1):1–26, 2002.

[42] C. J. Bishop, V. Ya. Gutlyanskiĭ, O. Martio, and M. Vuorinen. On conformal dilatation in space. *Int. J. Math. Math. Sci.*, (22):1397–1420, 2003.

[43] C. J. Bishop. Big deformations near infinity. *Illinois J. Math.*, 47(4):977–996, 2003.

[44] C. J. Bishop. δ-stable Fuchsian groups. *Ann. Acad. Sci. Fenn. Math.*, 28(1):153–167, 2003.

[45] C. J. Bishop. An explicit constant for Sullivan's convex hull theorem. In *In the tradition of Ahlfors and Bers, III*, volume 355 of *Contemp. Math.*, pages 41–69. Amer. Math. Soc., Providence, RI, 2004.

[46] C. J. Bishop. The linear escape limit set. *Proc. Amer. Math. Soc.*, 132(5):1385–1388 (electronic), 2004.

[47] C. J. Bishop. Orthogonal functions in H^∞. *Pacific J. Math.*, 220(1):1–31, 2005.

[48] C. J. Bishop. Boundary interpolation sets for conformal maps. *Bull. London Math. Soc.*, 38(4):607–616, 2006.

[49] C. J. Bishop. A criterion for the failure of Ruelle's property. *Ergodic Theory Dynam. Systems*, 26(6):1733–1748, 2006.

[50] C.J. Bishop. Harmonic measure by Garnett and Marshall. *Book review in Bull. Amer. Math. Soc.* 44(2):267-276, 2007.

[51] C.J. Bishop. An A_1 weight not comparable to any quasiconformal Jacobian. *In the tradition of Ahlfors-Bers, IV*, volume 432 of *Contemp. Math.*, pages 7–18. Amer. Math. Soc., Providence, RI. 2007

[52] C.J. Bishop and H. Hakobyan. A central set of dimension 2. *Proc. Amer. Math. Soc.*, pages 2453-2461, 136(2008), no. 7.

[53] C.J. Bishop. Conformal welding and Koebe's theorem. *Ann. of Math.* 166(2): 613–656, 2007.

[54] C.J. Bishop. Decreasing dilatations can increase dimension. *Proc. Amer. Math. Soc*, 136: 2453–2461, 2008.

[55] C.J. Bishop. A set containing rectifiable arcs locally but not globally. Pure and Applied Math. Quarterly, 7(1): 121-138, 2011. Special issue in honor of Fred Gehring, part 1 of 2.

[56] C.J. Bishop. Conformal mapping in linear time. Discrete and Computational Geometry, 44(2) 330-428, 2010.

[57] C.J. Bishop. Bounds for the CRDT algorithm. Computational Methods in Function Theory, 10(1): 325-366, 2010.

[58] C.J. Bishop. Optimal angle bounds for quadrilateral meshes. Discrete and Computational Geometry, 44(2): 308-329, 2010.

[59] C.J. Bishop. Tree-like decompositions and conformal maps. *Annals Acad. Sci. Fenn.*, 35(2): pages 389-404, 2010.

[60] C.J. Bishop. A random walk in analysis. In the collection *All That Math: portraits of mathematicians as young readers*, 2011, a special volume of Revisita Matematica Iberoamericana, celebrating the Centennial of the Real Sociedad Matematica Espanola, Edited by Antonio Cordoba, Jose L. Fernandez and Pablo Fernandez

[61] C.J. Bishop. True trees are dense. *Invent. Mat.* 197(2): pages 433-452, 2014.

[62] C.J. Bishop with E. Feinberg and J. Zhang. Examples concerning Abel and Cesaro limits. *J. Math. Analysis and App.*, 420(2): pages 1654-1661, 2014.

[63] C.J. Bishop. The order conjecture fails in S. *Journal d'Analyse*, 127(1): pages 283–302, 2015.

[64] C.J. Bishop. Constructing entire functions by quasiconformal folding. *Acta. Math.*, 214(1): pages 1–60, 2015.

[65] C.J. Bishop and K. Pilgrim. Dynamical dessins are dense. *Rev. Mat. Iberoamericana*, 31(3): pages 1033-1040, 2015.

[66] C.J. Bishop. Models for the Eremenko-Lyubich class *J. London Math. Soc.*, 92(1): 202-221, 2015.

[67] C.J. Bishop. Nonobtuse triangulations of PSLGs *Discrete and Computational Geometry*, 56(1): pages 43–92, 2016.

[68] C.J. Bishop. Quadrilateral meshes for PSLGs *Discrete and Computational Geometry*, 56(1): pages 1–42, 2016.

[69] C.J. Bishop, H. Hakobyan and M. Williams. Frequency of dimension distortion under quasisymmetric mappings , *Geometric and Functional Analysis (GAFA)*, 26(2): pages 379–421, 2016.

[70] C.J. Bishop. Models for the Speiser class. *Proc. London Math. Soc.*, 114(3), 765–797, 2017.

[71] C.J. Bishop. A transcendental Julia set of dimension 1. *Inventiones Math.*, 212(2), 407–460, 2018.

[72] C.J. Bishop and C. LeBrun. Anti-Self-Dual 4-manifolds, Quasi-Fuchsian groups and almost-Kahler geometry *Comm. in Analysis and Geometry*,special issue dedicated to Karen Uhlenbeck, 28(4), 745–780, 2020.

[73] C.J. Bishop and K. Lazebnik. Prescribing the Postsingular Dynamics of Meromorphic Functions, *Math. Annalen*, 375(3), 1761-1782, 2019.

[74] C.J. Bishop and S. Albrecht. A Speiser class Julia set with dimension near one, *Journal d'Analyse*, special issue dedicated to Larry Zalcman, 141(1), 49–98, 2020.

[75] C.J. Bishop, H. Drillick and D. Ntalampekos. Falconers' distance set conjecture can fail for strictly convex sets in $\mathbb{R}^d$. *Revista Mat. Iberoamericana*, 37(5), 1953–1968, 2021.

[76] C.J. Bishop. Quasiconformal maps with thin dilatations. *Publicacions Matemàtiques* vol 66(2022), 715-727.

[77] C.J. Bishop. Conformal images of Carleson curves. *Proc. Amer. Math. Soc.* 9 (2022), 90–94.

[78] C.J. Bishop. The traveling salesman theorem for Jordan curves. *Advances in Math.* 404 (2022), part A, Paper No. 108443, 27 pp.

[79] C.J. Bishop. Uniformly acute triangulations of PSLGs *Discrete & Computational Geometry* 70(2023), 1090–1120.

[80] C.J. Bishop. Uniformly acute triangulations of polygons. to appear *Discrete Comput. Geom.*

[81] C.J. Bishop, K. Lazebnik and M. Urbanski. Equilateral triangulations and the postcritical dynamics of meromorphic functions. to appear *Math. Annalen.*

[82] C.J. Bishop. Function theoretic characterizations of Weil-Petersson curves. to appear *Revista Mat. Iberoamericana*, 38 (2022), no. 7, 2355–2384.

[83] C.J. Bishop and K. Lazebnik. A geometric approach to polynomial and rational approximation. *International Mathematics Research Notices*, Volume 2024, Issue 12, June 2024, Pages 9936–9961.

[84] C.J. Bishop. Weil-Petersson curves, β-numbers, and minimal surfaces. To appear in *Annals of Math.*.

PREPRINTS

[85] C.J. Bishop. Non-removable sets for quasiconformal and quasi-isometric mappings in $\mathbb{R}^3$.

[86] C.J. Bishop. Interpolating sequences for the Dirichlet space and its multipliers.

[87] C.J. Bishop. Distortion of disks by conformal maps.

[88] C.J. Bishop. A fast quasiconformal mapping theorem for polygons.

[89] C.J. Bishop. Estimates for harmonic conjugation.

[90] C.J. Bishop. Another Besicovitch-Kakeya set.

[91] C.J. Bishop. A curve with no simple crossings by segments.

[92] C.J. Bishop. Conformal removability is hard.

[93] C.J. Bishop. BiLipschitz homogeneous hyperbolic nets. Submitted to *Annales Fennici Mathematici.*

[94] C.J. Bishop and L. Rempe. Non-compact Riemann surfaces are equilaterally trianguable. Submitted to *Inventiones.*

[95] C.J. Bishop. Optimal triangulations of polygons. Submitted to *Inventiones.*

[96] C.J. Bishop. Wandering domains.

[97] C.J. Bishop. Equi-triangulation of polygons. Submitted to *Amer. Math. Monthly.*

[98] C.J. Bishop and K. Lazebnik. Hilbert's lemniscate theorem for rational functions.

[99] C.J. Bishop and D.L. Bishop. Approximation by singular polynomial sequences.

[100] C.J. Bishop, A. Eremenko K. Lazebnik. On the shapes of rational lemniscates. Submited to *GAFA*.

BOOKS

[101] C.J. Bishop and Yuval Peres. Fractals in Analysis and Probability, Cambridge University Press, 2017

[102] C.J. Bishop and Yuval Peres. Conformal Fractals (in preparation)

[103] C.J. Bishop. The Riemann Mapping Theorem (in preparation)

[104] C.J. Bishop. Introduction to Transcendental Dynamics (in preparation)

[105] C.J. Bishop. Quasiconformal Mappings in the Plane (in preparation)

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