LIST OF PUBLICATIONS BY WOLFGANG WOESS

[1] "Aperiodische Wahrscheinlichkeitsmaße auf topologischen Gruppen", Monatshefte Math. 90 (1980) 339–345.

[2] "A local limit theorem for random walks on certain discrete groups", in "Probability Measures on Groups", Oberwolfach 1981, editor: H. Heyer. Springer Lect. Notes in Math. 928 (1982) 467–477.

[3] "Périodicité de mesures de probabilité sur les groupes topologiques", Inst. Elie Cartan 7 (1983) 170–180.

[4] "Puissances de convolution sur les groupes libres ayant un nombre quelconque de générateurs", Inst. Elie Cartan 7 (1983) 181–190.

[5] "Cogrowth of groups and simple random walks", Archiv d. Math. 41 (1983) 363–370.

[6] "A random walk on free products of finite groups", in "Probability Measures on Groups", Oberwolfach 1983, editor: H. Heyer. Springer Lect. Notes in Math. 1064 (1984) 467–470.

[7] "Harmonic functions on free groups", in "Probabilités sur les Structures Géometriques", editor: G. Letac. Proceedings, Toulouse (1984) 141–153.

[8] "Chaotic random walks on certain abelian groups", Colloquia Math. Soc. Jànos Bolyai 36 (1985) 1147–1167.

[9] "Random walks and periodic continued fractions", Advances in Applied Probability 17 (1985) 67–84.

[10] with M. A. PICARDELLO: "Random walks on amalgams", Monatshefte Math. 100 (1985) 21–33.

[11] with P. GERL: "Simple random walks on trees", European J. Combinatorics 7 (1986) 321–331.

[12] with P. GERL: "Local limits and harmonic functions for nonisotropic random walks on free groups", Probability Theory Rel. Fields 71 (1986) 341–355.

[13] "A short computation of the norms of free convolution operators", Proceedings Amer. Math. Soc. 96 (1986) 167–170.

[14] "Transience and volumes of trees", Archiv. d. Math. 46 (1986) 184–192.

[15] "Nearest neighbour random walks on free products of discrete groups", Bollettino Un. Mat. Ital. 5-B (1986) 961–982.

[16] "A description of the Martin boundary for nearest neighbour random walks on free products", in "Probability Measures on Groups", Oberwolfach 1985, editor: H. Heyer. Springer Lect. Notes in Math. 1210 (1986) 203–215.

[17] "Harmonic functions on infinite graphs", Rendiconti Sem. Mat. Fis. Milano. 56 (1986) 51–63.

[18] with M. A. PICARDELLO: "Martin boundaries of random walks: ends of trees and groups", Transactions Amer. Math. Soc. 302 (1987) 185-205.

[19] "Context-free languages and random walks on groups", Discrete Math. 67 (1987) 81–87.

[20] "Random walks on infinite graphs", in: "Stochastics in Combinatorial Optimization", CISM Lecture Notes, Udine. editor: G. Andreatta, F. Mason, P. Serafini. World Scientific, Singapore (1987) 255–263.

[21] with M. A. PICARDELLO: "Finite truncations of random walks on trees" (appendix to: A. Korànyi, M. A. Picardello, M. Taibleson: "Hardy-spaces on non-homogeneous trees"), Symposia Math. 29 (1988) 255-265.

[22] with M. A. PICARDELLO: "Harmonic functions and ends of graphs", Proc. Edinburgh Math. Soc. 31 (1988) 457–461.

[23] "Graphs and groups with tree-like properties", J. Combinatorial Th., Ser. B, 47 (1989) 361–371.

[24] with M. A. PICARDELLO: "A converse to the mean value property on homogeneous trees", Transactions Amer. Math. Soc. 311 (1989) 209–225.

[25] with B. MOHAR: "A survey on spectra of infinite graphs", Bull. London Math. Soc. 21 (1989) 209–234.

[26] with C. D. GODSIL, W. IMRICH, N. SEIFTER and M. E. WATKINS: "On bounded automorphisms of infinite graphs", Graphs and Combinatorics 5 (1989) 333-338.

[27] "Amenable group actions on infinite graphs", Math. Annalen. 284 (1989) 251–265.

[28] "Boundaries of random walks on graphs and groups with infinitely many ends", Israel J. Math. 68 (1989) 271–301.

[29] with M. A. PICARDELLO: "Ends of infinite graphs, potential theory, and electrical networks", in "Cycles and Rays: Basic Structures in Finite and Infinite Graphs", NATO ASI Series, Montréal. editor: G. Hahn, G. Sabidussi, R. E. Woodrow. Kluwer, Dordrecht (1990) 181–196.

[30] with P. M. SOARDI: "Amenability, unimodularity, and the spectral radius of random walks on infinite graphs", Math. Zeitschrift 205 (1990) 471–486.

[31] with P. M. SOARDI: "Uniqueness of currents in infinite resistive networks", Discrete Applied Math. 31 (1991) 37–49.

[32] "Topological groups and infinite graphs", Discrete Math. 95 (1991) 373–384.

[33] with M. A. PICARDELLO and M. TAIBLESON: "Harmonic functions on Cartesian products of trees with finite graphs", J. Functional Analysis 102 (1991) 379–400.

[34] with M. A. PICARDELLO: "Examples of stable Martin boundaries of Markov chains", in "Potential Theory", (M. Kishi, editor), Proceedings, Nagoya 1990, de Gruyter, Berlin (1991) 262–270.

[35] "Behaviour at infinity and harmonic functions of random walks on graphs", in "Probability Measures on Groups, X" (H. Heyer, editor), Proceedings, Oberwolfach (1990), Plenum Press, New York (1991) 437–458.

[36] with D. I. CARTWRIGHT: "Infinite graphs with nonconstant Dirichlet finite harmonic functions", SIAM J. Discrete Math. 5 (1992) 380–385.

[37] with M. A. PICARDELLO and M. TAIBLESON: "Harmonic measure of the planar Cantor set from the viewpoint of graph theory", Discrete Mathematics 109 (1992) 193–202.

[38] with V. A. KAIMANOVICH: "Behaviour at infinity and Dirichlet problem for random walks on graphs with a strong isoperimetric inequality", Probability Theory Rel. Fields. 91 (1992) 445–466.

[39] with M. A. PICARDELLO: "Martin boundaries of Cartesian products of Markov chains", Nagoya Math. J. 128 (1992), 153–169.

[40] with W. IMRICH and N. SAUER: "The average size of nonsingular sets in a graph", in: "Finite and Infinite Combinatorics in Sets and Logic", editor: N. Sauer et al. Kluwer, Dordrecht (1993), 199–205.

[41] with D. I. CARTWRIGHT and P. M. SOARDI: "Martin and end compactifications of non locally finite graphs", Transactions Amer. Math. Soc. 338 (1993) 670–693.

[42] with C. THOMASSEN: "Vertex-transitive graphs and accessibility", J. Combinatorial Th., Ser. B. 58 (1993) 248–268.

[43] "Fixed sets and free subgroups of groups acting on metric spaces", Math. Zeitschrift 214 (1993) 425–440.

[44] with S. GIULINI: "The Martin boundary of the Cartesian product of two hyperbolic spaces", J. Reine Angew. Math. 444 (1993) 17–28.

[45] "Random walks on infinite graphs and groups - a survey on selected topics", Bull. London Math. Soc. 26 (1994) 1–60.

[46] with D. I. CARTWRIGHT and V. A. KAIMANOVICH: "Random walks on the affine group of local fields and of homogeneous trees", Ann. Inst Fourier (Grenoble) 44 (1994) 1243–1288.

[47] with M. A. PICARDELLO: "The full Martin boundary of the bi-tree", Annals of Probability 22 (1994) 2203-2222.

[48] "Topological groups and recurrence of quasi transitive graphs", Rendiconti Sem. Mat. Fis. Milano 64 (1994) 185–213.

[49] "The Martin boundary for harmonic functions on groups of automorphisms of a homogeneous tree", Monatshefte Math. 120 (1995) 55–72.

[50] with V. A. KAIMANOVICH: "Construction of discrete, non-unimodular hypergroups", in: Probability Measures on Groups and Related Structures, Proceedings, Oberwolfach 1994 (editor: H. Heyer), World Scientific, Singapore (1995) 196–209.

[51] "Dirichlet problem at infinity for harmonic functions on graphs", International Conference on Potential Theory 1994, Proceedings (editors: J. Král et al.), de Gruyter, Berlin (1996) 189–217.

[52] with L. SALOFF-COSTE: "Computing norms of group-invariant transition operators", Combinatorics, Probability, and Computing 5 (1996) 161–178.

[53] with P. J. GRABNER: "Functional iterations and periodic oscillations for random walk on the Sierpiński graph", Stochastic Proc. Appl. 69 (1997) 127–138.

[54] with L. SALOFF-COSTE: "Transition operators, groups, norms, and spectral radii", Pacific J. Math. 180 (1997) 333–367.

[55] "Harmonic functions for group-invariant random walks on graphs", Contemporary Math. 206 (1997) 179–181.

[56] "A note on tilings and strong isoperimetric inequality", Math. Proc. Cambridge Phil. Soc. 124 (1998) 385–393.

[57] with N. SEIFTER: "Approximating graphs with polynomial growth", Glasgow Math. J. 42 (2000) 1–8.

[58] "Irrfahrten", in: Zur Kunst des formalen Denkens (Herausgeber: R. E. Burkard, W. Maass, P. Weibel), Passagen Verlag, Wien (2000) 173–192.

[59] with S. BROFFERIO: "On transience of card shuffling", Proc. Amer. Math. Soc. 129 (2001) 1513–1519.

[60] "Heat diffusion on homogeneous trees (note on a paper by Medolla and Setti)", Boll. Un. Mat. Ital. 4-B (2001) 703–709 and (Erratum) 5-B (2002) 259-260.

[61] with V. A. KAIMANOVICH: "Boundary and entropy of space homogeneous Markov chains", Annals of Probability 30 (2002) 323-363.

[62] with T. SMIRNOVA-NAGNIBEDA: "Random walks on trees with finitely many cone types", J. Theoret. Probab. 15 (2002) 399–438.

[63] with T. CECCHERINI-SILBERSTEIN: "Growth and ergodicity of context-free languages", Transactions Amer. Math. Soc. 354 (2002) 4597-4625.

[64] with T. CECCHERINI-SILBERSTEIN: "Growth sensitivity of context-free languages", Theoretical Computer Science 307 (2003) 103–116.

[65] "Generating function techniques for random walks on graphs", Contemporary Math. 338 (2003), 391–423.

[66] with D. I. CARTWRIGHT: "Isotropic random walks in a building of type $\tilde{A}_d$", Math. Zeitschrift 247 (2004) 101–135.

[67] "Lamplighters, Diestel-Leader graphs, random walks, and harmonic functions", Combinatorics, Probablity & Computing 14 (2005) 415–433. .

[68] with L. BARTHOLDI: "Spectral computations on lamplighter groups and Diestel-Leader graphs", J. Fourier Anal. Appl. 11 (2005) 175–202..

[69] "A note on the norms of transition operators on lamplighter graphs and groups", Int. J. Algebra and Computation 15 (2005) 1261–1272.

[70] with S. BROFFERIO: "Green kernel estimates and the full Martin boundary for random walks on lamplighter groups and Diestel-Leader graphs", Ann. Inst. H. Poincaré Probab. Stat. 41 (2005) 1101–1123; erratum in vol. 42 (2006), 773–774..

[71] with L. SALOFF-COSTE: "Transition operators on co-compact G-spaces", Revista Mat. Iberoamericana 22 (2006) 747–799.

[72] with S. BROFFERIO: "Positive harmonic functions for semi-isotropic random walks on trees, lamplighter groups, and DL-graphs", Potential Analysis 24 (2006) 245–265.

[73] with M. PEIGNÉ: "On recurrence of reflected random walk on the half-line", with an appendix on results of Martin BENDA, preprint, TU Graz (2006). [This will remain a preprint posted on ArXiV; a comletely new and different version comprising part of its material is the paper [84] with Peigné, see below.]

[74] with R. ORTNER: "Non-backtracking random walks and cogrowth of graphs", Canadian J. Math. 59 (2007) 828–844.

[75] with A. KARLSSON: "The Poisson boundary of lamplighter random walks on trees", Geometriae Dedicata 124 (2007) 95–107.

[76] with D. I. CARTWRIGHT: "The spectrum of the averaging operator on a network (metric graph)", Illinois J. Math. 51 (2007) 805–830.

[77] with L. BARTHOLDI and M. NEUHAUSER: "Horocyclic products of trees", J. European Math. Soc. 10 (2008) 771-816.

[78] with F. LEHNER and M. NEUHAUSER: "On the spectrum of lamplighter groups and percolation clusters", Mathematische Annalen 342 (2008) 69–89.

[79] with L. SALOFF-COSTE: "Computations of spectral radii on G-spaces", Contemporary Math. 484 (2009) 195–218.

[80] with W. HUSS and E. SAVA: "Entropy sensitivity of languages defined by infinite automata", via Markov chains with forbidden transitions", Theoretical Computer Science 411 (2010) 44–46.

[81] with A. BENDIKOV, L. SALOFF-COSTE and M. SALVATORI: "The heat semigroup and Brownian motion on strip complexes", Advances in Mathematics 226 (2011) 992–1055.

[82] with M. PEIGNÉ: "Stochastic dynamical systems with weak contractivity properties, I. Strong and local contractivity. With a chapter featuring results of Martin Benda", Colloquium Math. 125 (2011) 31–54.

[83] with M. PEIGNÉ: "Stochastic dynamical systems with weak contractivity properties, II. Iteration of Lipschitz mappings", Colloquium Math. 125 (2011) 55–81.

[84] with T. CECCHERINI-SILBERSTEIN: "Context-free pairs of groups. I - Context-free pairs and graphs", European J. Combinatorics 33 (2012) 1449–1466.

[85] "Context-free pairs of groups. II - Cuts, tree sets, and random walks", Discrete Mathematics 312 (2012) 157–173.

[86] with S. BROFFERIO and M. SALVATORI: "Brownian motion and harmonic functions on Sol(p,q)", Internat. Math. Research Notes (IMRN) 22 (2012) 5182–5218.

[87] "What is a horocyclic product, and how is it related to lamplighters?", Internationale Math. Nachrichten 224 (2013) 1–27.

[88] with A. BENDIKOV, A. GRIGOR'YAN and Ch. PITTET: "Isotropic Markov semigroups on ultra-metric spaces", Uspekhi Mat. Nauk 69 (2014) No. 4 (418), 3–102. English original in Russian Math. Surveys 69 (2014) No. 4, 589–680.

[89] with J. PARKINSON: "Regular sequences and random walks in affine buildings", Ann. Institut Fourier (Grenoble) 65 (2015) 675–707.

[90] with A. BENDIKOV, L. SALOFF-COSTE and M. SALVATORI: "Brownian motion on treebolic space: escape to infinity", Revista Matematica Iberoamericana 31 (2015) 935–976.

[91] with T. BOIKO: "Moments of Riesz measures on Poincaré disk and homogeneous tree – a comparative study", Expositiones Math. 33 (2015) 353–374.

[92] with A. BENDIKOV, L. SALOFF-COSTE and M. SALVATORI: "Brownian motion on treebolic space: positive harmonic functions", Ann. Institut Fourier (Grenoble) 66 (2016) 1691–1731.

[93] with T. HIRSCHLER: "Comparing entropy rates on finite and infinite rooted trees", IEEE Trans. Information Theory 64 (2018) 5570–5580.

[94] with A. BENDIKOV and W. CYGAN: "Oscillating heat kernels on ultrametric spaces", Journal of Spectral Theory 9 (2019) 195–226.

[95] with J. KLOAS: "Multidimensional random walk with reflections", Stochastic Proc. Appl. 129 (2019) 336–354.

[96] with M. A. PICARDELLO: "Bundary representations of λ-harmonic and polyharmonic functions on trees", Potential Analysis 51 (2019) 541–561.

[97] with M. A. PICARDELLO: "Multiple boundary representations of λ-harmonic functions on trees", London Math. Soc. Lecture Notes 461 (2020) 95–125.

[98] with T. HIRSCHLER: "Polyharmonic functions for finite graphs and Markov chains", in "Frontiers in Analysis and Probability: in the Spirit of the Strasbourg-Zrich Meetings", pp. 77–90, Springer (2020).

[99] With Ch. LINDORFER: "The language of self-avoiding walks", Combinatorica 40 (2020) 691–720.

[100] With M. PEIGNÉ: "Recurrence of 2-dimensional queueing processes, and random walk exit times from the quadrant", Annals of Applied Probability 31 (2021) 2519–2537.

[101] With E. SAVA-HUSS: "Boundary behaviour of λ-polyharmonic functions on regular trees", Annali di Matematica Pura ed Applicata 200 (2021) 35–50.

[102] With T. HIRSCHLER: "Laplace and bi-Laplace equations for directed networks and Markov chains", Expositiones Mathematicae 39 (2021) 271–301.

[103] "Ratio limits and Martin boundary", Documenta Math. 26 (2021) 1501–1528.

[104] With A. MURANOVA: " Networks with complex weights: Green function and power series", mdpi Mathematics 2022, 10, 820, 20pp.

[105] With V: A: KAIMANOVICH: "Limit distributions of branching Markov chains", Annales Inst. H. Poincaré (Prob. Stat.), to appear.

[106] "Some old and basic facts about random walks on groups", arXiv:2209.00319 (2022).

[107] With R. I. MÖLLER: "Amalgamated products of G-spaces", unfinished manuscript, TU Graz (2020/22).

Books

[A] "Catene di Markov e Teoria del Potenziale nel Discreto" (Lecture notes on Markov chains and discrete potential theory), Quaderni dell'Unione Matematica Italiana 41 (165 pages), 1996.

[B] "Random Walks on Infinite Graphs and Groups", Cambridge Tracts in Mathematics 138, Cambridge Univ. Press, (xi + 334 pages), 2000.

[C] with M. A. PICARDELLO (editors): "Random Walks and Discrete Potential Theory", Proceedings, Cortona 1997. Symposia Mathematica 39, Cambridge Univ. Press. (ix + 361 pages), 1999.

[D] with P. M. GRABNER (editors): "Fractals in Graz 2001 - Anlysis, Dynamics, Geometry, Stochastics", Proceedings, Graz 2001. Birkhäuser, Basel (iii+283 pages), 2003.

[E] with V. A. KAIMANOVICH and K. SCHMIDT (editors): "Random Walks and Geometry", Proceedings (ESI, Vienna, 2001), De Gruyter, Berlin (x + 532 pages), 2004.

[F] "Denumerable Markov Chains - Generating Functions, Boundary Theory, Random Walks on Trees", (xviii+351 pages), European Math. Society Publishing House, 2009.

[G] with D. LENZ and F. SOBIECZKY (editors): "Random Walks, Boundaries and Spectra", Proceedings (Graz - St. Kathrein, 2009), Progess in Probability, vol 64. Birkhäuser, Basel, 324+xxvi pages, 2011.