

Tomasz Downarowicz  
Institute of Mathematics and Computer Sciences  
Wroclaw University of Technology  
50-370 Wroclaw  
Poland

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## PUBLICATIONS

- [1] T. Downarowicz, *Some properties of weakly almost periodic mappings*, Colloq. Math. **54** (1987), 241–252.
- [2] T. Downarowicz, *Weakly almost periodic mappings on one and two-manifolds*, Colloq. Math. **54** (1987), 253–259.
- [3] W. Bartoszek and T. Downarowicz, *Compactness of trajectories of dynamical systems in complete uniform spaces*, Supplemento ai Rendiconti del Circolo Matematico di Palermo, Proc. of the 13th Winter School on Abstract Analysis, serie II, numero 10, Palermo, 1985, pp. 13–16.
- [4] T. Downarowicz and A. Iwanik, *Multiple recurrence for discrete time Markov processes II*, Colloq. Math. **55** (1988), 311–316.
- [5] T. Downarowicz and A. Iwanik, *Quasi-uniform convergence in compact dynamical systems*, Studia Math. **89** (1988), 11–25.
- [6] T. Downarowicz, *A minimal 0-1 flow with noncompact set of ergodic measures*, Probab. Th. Rel. Fields **79** (1988), 29–35.
- [7] T. Downarowicz, *Sets of invariant measures of minimal flows - Announcement*, Bull of the Polish Academy of Sciences **35** (1987), 521–523.
- [8] T. Downarowicz, *How a function on a zero-dimensional group  $\Delta_a$  defines a Toeplitz flow*, Bull. Polish Acad. Sci. **38** (1990), 219–222.
- [9] T. Downarowicz, *The Choquet simplex of invariant measures for minimal flows*, Israel J. Math. **74** (1991), 241–256.
- [10] T. Downarowicz, D. Mauldin and T. Warnock, *Random circle homeomorphisms*, Ergod. Th. and Dynam. Sys. **12** (1992), 441–458.
- [11] T. Downarowicz, *Quasi-uniform limits of uniformly recurrent points*, Ergodic Theory and its Connections with Harmonic Analisys, Proc. of the 1993 Alexandria Conference; *Lecture Note Series*, vol. 205, Londyn, 1995, pp. 253–258.
- [12] T. Downarowicz, *Strictly nonpointwise Markov operators and weak mixing*, Ergodic Theory and its Connections with Harmonic Analisys, Proc. of the 1993 Alexandria Conference; *Lecture Note Series*, vol. 205, Londyn, 1995, pp. 259–272.
- [13] T. Downarowicz, J. Kwiatkowski and Y. Lacroix, *A criterion for Toeplitz flows to be topologically isomorphic and applications*, Colloq. Math. **68** (1995), 219–228.
- [14] T. Downarowicz and Y. Lacroix, *A non-regular Toeplitz flow with preset pure point spectrum*, Studia Math. **120** (1996), 235–246.
- [15] T. Downarowicz, *The Royal Couple conceals their mutual relationship – A noncoalescent Toeplitz flow*, Israel J. Math. **97** (1997), 239–252.
- [16] T. Downarowicz, *Weakly almost periodic flows and hidden eigenvalues*, Topological Dynamics and Applications (M.G. Nerurkar, D.P. Dokken, D.B. Ellis,

- ed.), AMS Contemporary Math. Series, vol. 215, Providence, 1998, pp. 101–120.
- [17] T. Downarowicz and Y. Lacroix, *Almost 1-1 extensions of Furstenberg-Weiss type*, Studia Math. **130** (1998), 149–170.
- [18] T. Downarowicz and Y. Lacroix, *Merit factors and Morse sequences*, Theoretical Computer Science **209** (1998), 377–387.
- [19] T. Downarowicz, *Reading along arithmetic progressions*, Colloq. Math. **80** (1999), 293–296.
- [20] T. Downarowicz, J. Kwiatkowski and Y. Lacroix, *Spectral isomorphisms of Morse flows*, Fundamenta Math. **163** (2000), 193–213.
- [21a] T. Byczkowski, T. Downarowicz, Z. Lipecki and Z. Romanowicz, *Anzelm Iwanik (1946–1998)* (in Polish), Wiadomości matematyczne **35** (1999), 191–200.
- [21b] T. Downarowicz, and Z. Lipecki, *Anzelm Iwanik (1946–1998)*, Collq. Math. **84/85** (2000), 1–12.
- [22] G. Barat, T. Downarowicz, A. Iwanik and P. Liardet, *Propriétés topologiques et combinatoires des échelles de numération* (in French), Collq. Math. **84/85** (2000), 285–306.
- [23] T. Downarowicz and F. Durand, *Factors of Toeplitz flows and other almost 1-1 extensions over group rotations*, Math. Scand. **90.1** (2002), 57–72.
- [24] T. Downarowicz, *Entropy of a symbolic extension of a dynamical system*, Ergod. Th. and Dynam. Sys. **21** (2001), 1051–1070.
- [25a] T. Downarowicz, *Entropia* (in Polish), Matematyka–Społeczeństwo–Nauczanie **27** Zeszyty XXIV Szkoły Matematyki Poglądowej, Grzegorzewice (2001).
- [25b] T. Downarowicz and P. Frej, *Entropy*, Proceedings of the Karpacz Conference in Applied Mathematics (2001), 31–44.
- [26] G. Barat, T. Downarowicz ad P. Liardet, *Dynamiques associées à une échelle de numération* (in French), Acta Arithmetica **103** (2002), 41–78.
- [27] T. Downarowicz and J. Serafin, *Fiber entropy and variational principles in compact non-metrizable spaces*, Funda. Math. **172** (2002), 217–247.
- [28] T. Downarowicz and X. Ye, *When every point is either transitive or periodic*, Colloq. Math. **93** (2002), 137–150.
- [29] T. Downarowicz and J. Serafin, *Possible entropy functions*, Israel J. Math. **135** (2003), 221–250.
- [30] T. Downarowicz and J. Kwiatkowski, *Weak closure theorem fails for  $\mathbb{Z}^2$ -actions*, Studia Math. **153** (2002), 115–125.
- [31] M. Boyle and T. Downarowicz, *The entropy theory of symbolic extensions*, Inventiones Mathematicae **156** (2004), 119–161.
- [32] T. Downarowicz and B. Weiss, *Entropy theorems along times when  $x$  visits a set*, Illinois Jour. Math. **48** (2004), 59–69.
- [33] T. Downarowicz and S. Newhouse, *Symbolic extension entropy and smooth dynamical systems*, Inventiones Mathematicae **160** (2005), 453–499.
- [34] T. Downarowicz and B. Frej, *Measure-theoretic and topological entropy of a Markov operator*, Ergod. Th. and Dynam. Sys. **25** (2005), 455–481.
- [35] T. Downarowicz and D. Mauldin, *Some remarks on output measures*, Topology and Appl., Proceedings of the Dynamical Systems Conference Denton, 25-29 May 2003, vol. 152, 2005, pp. 11–25.
- [36] T. Downarowicz, *Entropy structure*, J. d'Analyse **96** (2005), 57–116.

- [37] T. Downarowicz and J. Serafin, *Semicocycle extensions and the stroboscopic property*, Topology and Appl. **153** (2005), 97–106.
- [38] T. Downarowicz, *Survey of odometers and Toeplitz flows*, Contemporary Mathematics, Algebraic and Topological Dynamics (Kolyada, Manin, Ward eds), vol. 385, 2005, pp. 7–38.
- [39] T. Downarowicz, *Minimal models for noninvertible and not uniquely ergodic systems*, Israel J. Math. **156** (2006), 93–110.
- [40] T. Downarowicz, P. Maličký, L'. Snoha and V. Špitalský, *Measure of non-invertibility of minimal maps*, J. Math. Anal. Appl. **317** (2006), 714–723..
- [41] M. Boyle, T. Downarowicz, *Symbolic extension entropy:  $C^r$  examples, products and flows*, Continuous and Discrete Dynamical Systems **16**, (2006), 329–341.
- [42] V. Bergelson and T. Downarowicz, *Large sets of integers and hierarchy of mixing properties of measure-preserving systems*, Coll. Math. **110** (2008), 117–150.
- [43] T. Downarowicz, *Faces of simplices of invariant measures*, Israel J. Math. **165** (2008), 189–210.
- [44] T. Downarowicz and A. Maass, *Finite rank Brattelli Diagrams are expansive*, Ergodic Th. Dynam. Sys. **28** (2008), no. 03, 739–747.
- [45] T. Downarowicz, P. Grzegorek, *Epsilon-independence between two processes*, Studia Math. **188** (2008), 77–95.
- [46] T. Downarowicz, *Entropy*, Scholarpedia (ISSN 1941-6016, <http://www.scholarpedia.org/article/Entropy>).
- [47] R. Adler, T. Downarowicz and M. Misiurewicz, *Topological Entropy*, Scholarpedia (ISSN 1941-6016, [http://www.scholarpedia.org/article/Topological\\_entropy](http://www.scholarpedia.org/article/Topological_entropy)).
- [48] T. Downarowicz, *Law of series*, Scholarpedia (ISSN 1941-6016, [http://www.scholarpedia.org/article/Law\\_of\\_series](http://www.scholarpedia.org/article/Law_of_series)).
- [49] T. Downarowicz and A. Maass, *Smooth interval maps have symbolic extensions – The Antarctic Theorem*, Inventiones Math. **173** (2009), 617–636.
- [50] F. Balibrea, T. Downarowicz, R. Hric and L. Snoha, V. Špitalský, *Almost totally disconnected minimal systems*, ETDS **29** (2009), 737–766.
- [51] M. Beiglböck, V. Bergelson, T. Downarowicz, A. Fish, *Solvability of Rado systems in D-sets*, Topology and Its Applications (Special Hindman's Volume) **156** (2009), 2565–2571.
- [52] T. Downarowicz, J. Serafin, *Phenomena in rank-one  $Z^2$ -actions*, Studia Math **192** (2009), 281–294.
- [53] T. Downarowicz, Y. Lacroix, D. Leandri, *Spontaneous clustering in theoretical and some empirical stochastic processes*, ESAIM P&S **14** (2010), 256–262.
- [54] T. Downarowicz, P. Grzegorek and Y. Lacroix, *Attracting and repelling in stationary signal processes*, Nonlinearity **23** (2010), 2793–2813.
- [55] T. Downarowicz, *Symbolic extensions of smooth interval maps*, Probability Surveys **7** (2010), 84–104.
- [56] T. Downarowicz, Y. Lacroix, *The law of series*, Ergod. Th. Dynam. Sys. **31** (2010), 351–357.
- [57] T. Downarowicz, **Entropy in dynamical systems**, New Mathematical Monographs 18, Cambridge University Press, Cambridge, 2011.

- [58] T. Downarowicz, *Two commuting maps without common minimal points*, Colloq. Math. **123** (2011), 205–209.
- [59] T. Downarowicz, *Prawo serii w ujęciu matematycznym* (in polish), Wiadom. Mat. **47** (2011), 1–16.
- [60] T. Downarowicz, D. Huczek, *Zero-dimensional principal extensions*, Acta Applicandae Mathematica (to appear).
- [61] T. Downarowicz, Y. Lacroix, *Topological entropy zero and asymptotic pairs*, Israel J. Math., online first.
- [62] T. Downarowicz, J. Serafin, *A short proof of the Ornstein Theorem*, Ergod. Th. Dynam. Sys. **32** (2012), 587–597.
- [63] T. Downarowicz, Y. Lacroix, *Forward mean proximal pairs and zero entropy*, Israel Journal Math., online first.
- [64] T. Downarowicz, *Positive topological entropy implies chaos DC2*, Proc. AMS (to appear).
- [65] T. Downarowicz, Y. Lacroix, *Measure-theoretic chaos*, (submitted).
- [66] T. Downarowicz, D. Huczek, *Faithful zero-dimensional principal extensions*, (submitted).