Publications – Winter 2002

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- Publications

Research Publications

[1] *Ambiguous points of planar sets and functions,* 256 pp (dissertation).

[2] *Samely ambiguous points of arbitrary planar sets and functions,* Zeitsch, f. Math. Logik and Grundlagen d. Math., Bd. 19 (1973) 17–23

[3] *Rectifiably ambiguous points of planar sets,* J. Australian Math. Soc., V.XX (Series A), Part 1 (1975) 85–109 (with F. Bagemihl).

[4] *The Baire category of sets and access,* Zeitsch, f. Math. Logik und Grundlagen d. Math., Bd. 21, Issue 4 (1975) 428–447

[5] *An example of a function with multiple ambiguities,* Zeitsch. f. Math. Logik und Grundlagen d. Math., Bd. 21, Issue 4(1975) 413–416.

[6] *Cluster sets of arbitrary functions defined on plane sets,* Czechoslovak Math. J. (101), (1976) 448–457.

[7] *Most directional cluster sets have common values,* Fund. Math. 101 (1978) 1–10 (with C.L. Belna and M.J. Evans).

[8] *A directional cluster set example,* Enseignment Math. T. XXII, facs. 3–4 (1976) 219–225 (with C.L. Belna and M.J. Evans).

[9] *On qualitative cluster sets,* Colloquium Math., T. XXXVVI, fasc. 2 (1977) 255–261 (with M.J. Evans).

[10] *Baire category and disjoint rectilinear accessibility,* J. London Math. Soc. (2) 17 (1976) 245–248.

[11] *Transfinite separapation axioms in topological spaces,* Kyunpook Math. J., V. 17, no. 1 (1977) 6–13 (with A. Solomon).

[12] *A characterization of circles containing rational points,* Amer. Math. Monthly, V. 86, no. 4 (April 1979) 287–290 (with L. Krajewski).

[13] *A note on covering the plane with connected curves,* Zeitsch f. Math. Logik und Grundlagen d. Math., Bd. 24 (1978) 453–456.

[14] *Symmetric monotonicity,* Acta Math. Sci. Hungaricae, T. 34 (1–2), (1979) 17–22 (with C. L. Belna and M .J. Evans).

[15] *Symmetric and ordinary differentiation,* Proc. Amer. Math. Soc., V. 72, 261–267 (with C. L. Belna and M. J. Evans).

[16] *Directional cluster sets and essential directional cluster sets of real functions defined in the upper half plane,* Rev. Roum. Math. Pures et Appli., V. 23, no. 4 (1978) 533–542 (with M. J. Evans).

[17] *Symmetric and strong differentiation,* Amer. Math. Monthly, V. 86, no. 2 (1979) 121–123 (with C. L. Belna and M. J. Evans).

[18] *Parametric differentiation,* Colloquium Math. **XLV** Fasc. 1, (1981) pp. 125–131 (with M. J. Evans).

[19] *Planar continua with restricted limit directions,* Pacific Math. J., V. 87, no. 2 (1980) 47–48 (with C. L. Belna and M. J. Evans).

[20] *On the approximate derivatives of continuous functions,* Math. Bul. Inst. Acad. Sinica, V. 8, no. 4, 609–614 (with M. J. Evans).

[21] *The equality of unilateral derivatives,* Proc. Amer. Math. Soc., V. 79, no. 4 (1980) 609–613 (with M. J. Evans).

[22] *Some set theoretic properties of σ–porous sets,* Real Anal. Exchange, V. 6, no. 1 (1980) 114–120 (with J. Foran).

[23] *A note on pointwise limits of functions which are approximately continuous and almost everywhere continuous,* Studia Math. Acad. Sci. Hungaricae, **14** (1979) pp. 319–323 (with G. V. Cox).

[24] *Nowhere monotone functions and a question of Garg,* Fund. Math. **CXVIII** (1982) pp. 17–21.

[25] *Classes of Baire functions,* Trans. Amer. Math. Soc. **269**, no. 2, (1982) 625–638, (with G.V. Cox).

[26] *Analogues to the Denjoy–Young–Saks theorem,* Proc. Amer. Math. Soc. **271**, no. 1, (1982) 253–260, (with C.L. Belna, G.T. Cargo, M.J. Evans).

[27] *A note on the convergence of convex functions,* Rev. Roum. Pure et. Appl., **XXX** no. 2 (1985) 109–110.

[28] *Some problems in need of solution,* Real Anal. Exchange, V. 8, no. 1, (1981) pp. 31–41.

[29] *Another note on σ–porous sets,* Real Anal. Exchange, **9** no. 1 (1982) pp. 261–271 (with T. A. Vessey).

[30] *A porosity characterization of symmetric perfect sets,* Contemporary Mathematics **42** 1985 pp. 81–85 (with B. S. Thomson).

[31] *A Pathological approximately smooth function,* (with M. J. Evans) Acta Math. Hung. 46, 3–4 (1985) 211–215.

[32] *L_p smoothness and approximate continuity,* Proc. Amer. Math. Soc., **92** no. 2, (1984) pp. 258–262 (with M. J. Evans).

[33] *On series of representation of functions,* Rev. Roum. Pures et Appl. **35** (1990) no. 1, pp. 1–32 (with J. Ceder).

[34] *Typical continuous functions are virtually non–monotone,* Proc. Amer. Math. Soc., **94** no. 2, (1985) pp. 244–248 (with M. Laczkovich).

[35] *Measures for which σ–porous sets are null* J. London Math. Soc., (2) 32 (1985) pp. 236–244 (with D. Preiss).

[36] *A note on points of absolute continuity of symmetrically differentiable functions,* Acta. Math. Univ. Com. XLVIII–XLIX(1986) pp. 145–147 (with T. Salat).

[37] *Qualitative directional cluster sets,* Bull. Polish Nat. Acad. Sci., **34** no. 1–2 (1986) pp. 11–14 (with M. J. Evans).

[38] *Approximate continuity points and L–points of integrable functions,* Real Anal. Exchange **11** no. 2 (1985/86) p. 390–410 (with M.J. Evans).

[39] *A typical property of Baire 1 Darboux functions,* Proc. Amer. Math. Soc. 98 (1986) no.3 pp. 441–447 (with M. J. Evans).

[40] *Remarks on points of strong differentiability of real functions,* Acta. Math. Univ. Com. LII–LIII(1987) pp. 235–241 (with T. Salat).

[41] *L–points of typical continuous functions in the Zahorski classes,* Real Anal. Exchange, **12** no. 1 (1986) pp. 337–348 (with M. J. Evans).

[42] *Measurable Darboux functions,* Proc. Amer. Math. Soc., **102** no. 3, (March 1988) pp. 603–608. (with J. Brown and M. Laczkovich).

[43] *The homeomorphic transformation of c–sets into superdense sets,* Real Anal. Exchange, **14** no. 2 (1989) pp. 464–469 (with W. Wilczynski)

[44] *The convexity theorems for generalized Riemann derivatives,* Real Anal. Exchange, **15** (1989/90) no. 2, pp. 652-674 (with M. Laczkovich).

[45] *The Borel structure of iterates of continuous functions,* J.Edinburgh Math. Soc. (2) **32**(1989) no. 3, pp. 483–494 (with M. Laczkovich).

[46] *Monotonicity theorems for generalized Riemann derivatives,* Rend. Circ. Mat. Palermo (2) **38** (1989) no. 3, pp. 437–454 (with M. Laczkovich).

[47] *Approximations of continuous functions by squares,* J. Ergodic Theory and Dyn. Sys. **10** (1990) pp. 361–366. (with M. Laczkovich).

[48] *Parametric semicontinuity implies continuity almost everywhere,* Real Anal. Exchange, **17** (1992) no. 2, pp. 668–680 (with M. Laczkovich).

[49] *A criterion for the nonporosity of general Cantor sets,* Proc. Amer. Math. Soc., **111** no. 2 (1991) pp. 365–372.

[50] *The packing dimension of a typical continuous function is 2,* Real Anal. Exchange, **14** no. 2 (1989) pp. 345–359 (with G. Petruska).

[51] *The approximate symmetric behavior of real functions,* Real Anal. Exchange, **14** no. 2 (1989) pp. 375–392 (with M.J. Evans).

[52] *Characterization of turbulent one dimensional mappings via forward limit sets,* Trans. Amer. Math. Soc. **326** (1991) no. 1, pp. 261–280 (with M. J. Evans, M. Lee, and R. O'Malley).

[53] *Remarks on Laczkovich's circle squaring proof,* Real Anal. Exchange, **15** (1989/90) no. 1, pp. 35–43.

[54] *A historical note on the measurability properties of symmetrically continuous and symmetrically differentiable functions,* Real Anal. Exchange, **15** no. 2 (1989/90) pp. 768–771 (with M. Laczkovich).

[55] *Approximate high order smoothness,* Acta. Math. Hung. **61** (1993), pp. 369–388. (with Z. Buczolich and M.J. Evans).

[56] *An Elementary Proof of Freiling's Symmetric Covering Theorem,* Real Anal. Exchange, **16** no. 2 (1990/91) (with M. Laczkovich).

[57] *The Exact Borel Class Where a Density Completeness Axiom Holds,* Real Anal. Exchange, **17** no. 1 (1991) pp. 272–282 (with C. Freiling).

[58] *A Symmetric Porosity Conjecture of Zajicek,* Real Anal. Exchange **17** no. 1 (1991) pp. 258–272 (with M.J. Evans and K. Saxe).

[59] *A Characterization of σ–Symmetrically Porous Symmetric Cantor Sets,* Proc. Amer. Math. Soc. **122** (1994) pp. 805–810 (with M.J. Evans and K. Saxe).

[60] *Symmetric Porosity of Symmetric Cantor Sets,* Czech. Math. J. **44** (1994), 251–264 . (with M. J. Evans and K. Saxe).

[61] *First Return Approachability,* J. Math. Anal. Appl. **199** (1996), 545–557. (with M. J. Evans and U. B. Darji)

[62] *Almost Continuous Bounded Functions* Real Anal. Exchange, **20** No. 1 (1994) (with Udayan B. Darji)

[63] *The space of ω-limit sets of a continuous map of the interval,* Trans. Amer. Math. Soc. **348** No. 4 (1996) pp. 1357–1372 (with A. Blokh, A.M. Bruckner, and J. Smítal) .

[64] *Symmetric primitives and Lusin's condition $\mathcal{N}$*, Acta Math. Hung, **76** No. 4 (1997) 279–285. (with V. Skvortsov)

[65] *A visit to the Erdős problem*, Proc. Amer. Math. Soc. **126** (1998), No. 3, 819–822. (with M. Laczkovich)

[66] *Contrasting Symmetric Porosity and Porosity*, J. Applied Anal. **4** No. 1 (1998), 19–41. (with M.J. Evans)

[67] *Universally Polygonally Approximable Functions*, J. Applied Analysis, **6** No. 1 (2000), 25–45 (with M.J. Evans and Richard O'Malley)

[68] *Exceptional sets for universally polygonally approximable functions*, J. Applied Analysis, (accepted for publication), (with M. J. Evans)

[69] *A perplexing collection of Baire 1 functions*, Real Anal. Exchange, **25** no. 2 (1999/00) (with M. J. Evans and R. J. O'Malley).

[70] *A Darboux, Baire one fixed point theorem*, Real Anal. Exchange, **26** no. 2 (2001)(with Ralph Svetic and Cliff Weil)

[71] *One Old Problem, One New, and their Equivalence*, Tatra J. Math. (accepted for publication) (with Chris Freiling and Miklós Laczkovich)

[72] *The Quasicontinuity of delta fine functions*, Real Anal. Exch. (accepted for publication) (with M. J. Evans)

[73] *Almost everywhere first return recovery*, Proc. Edinburgh Math. Soc., submitted (with M.J. Evans)

[74] *Consistent recovery and polygonal approximation of functions*, Acta Math. Hung., submitted (with M.J. Evans)

[75] *Symmetrically approximatively continuous functions, consistent density theorems, and Fubini type inequalities*, (with M. Laczkovich)

[76] *Consistent recovery and polygonal approximation of functions*, Real Anal. Exchange, submitted (with M.J. Evans and R.J. O'Malley)

Other Publications

[1] Edited and set in LaTeX the book *The Heritage of R.L. Moore* 456pp by T. Traylor.

[2] *Reformation at St. Olaf,* Symbolic Computation in Undergraduate Mathematics, MAA Notes and Reports Series, vol. 24, pp 161–167.

[3] *A Mentored–Teaching Postdoctoral Program in Mathematics*, M.A.A. Press (with Clifton Corzatt)

[4] *The St. Olaf Contract*, Programs that Work, M.A.A. Press (with Clifton Corzatt)

[5] *How to Make the First Cut*, Concerns of Young Mathematicians, (Newsletter of the Young Mathematicians Network), vol. 1, **12**, December, 1993.

[6] *Keeping Your Research Alive*, Concerns of Young Mathematicians, (Newsletter of the Young Mathematicians Network), vol. 3, **9**, March 8, 1995.

[7] *Budapest Semesters in Mathematics*, CUR Undergraduate Research Quarterly, Spring, 1995.

[8] *A Glimse at the Budapest Semesters in Mathematics*, Math Horizons, Spring, 1999.

[9] *Keeping Your Research Alive*, and essay within: STARTING OUR CAREERS: A COLLECTION OF ESSAYS AND ADVICE ON PROFESSIONAL DEVELOPMENT FROM THE YOUNG MATHEMATICIANS' NETWORK, Edited by Curtis D. Bennett and Annalisa Crannell. American Mathematical Society, 1999, 116 pp, ISBN 0-8218-1543-1.