

William T. Trotter

List of Publications

September 15, 2005

Books

- [1] *Combinatorics and Partially Ordered Sets: Dimension Theory*, The Johns Hopkins University Press, Baltimore, MD, 1992.
- [2] *Planar Graphs*, DIMACS Series in Discrete Mathematics and Theoretical Computer Science, American Mathematical Society, Providence, RI, 1993.

Articles

- [1] Characterization of the finite partition property for a collection of universal subcontinua, *Proc. Amer. Math. Soc.* **25** (1970), 760–762.
- [2] A decomposition theorem for collections of universal subcontinua, *Colloq. Math.* **23** (1971), 233–239.
- [3] Maximal dimensional partially ordered sets II, *Discrete Math.* **5** (1973), 33–44 (with K. P. Bogart).
- [4] Dimension of the crown \mathbf{S}_n^k , *Discrete Math.* **8** (1974), 85–103.
- [5] Inequalities in dimension theory for posets, *Proc. Amer. Math. Soc.* **47** (1975), 311–316.
- [6] Irreducible posets with arbitrarily large height exist, *J. Comb. Theory (A)* **17** (1974), 337–344.
- [7] Embedding finite posets in cubes, *Discrete Math.* **12** (1975), 165–172.
- [8] A note on Dilworth’s embedding theorem, *Proc. Amer. Math. Soc.* **52** (1975), 33–39.
- [9] A bound on the dimension of interval orders, *J. Comb. Theory (A)* **21** (1976), 319–238 (with K. P. Bogart and I. Rabinovitch).
- [10] A forbidden subposet characterization of an order dimension inequality, *Math. Systems Theory* **10** (1976), 91–96.
- [11] A generalization of Hiraguchi’s inequality for posets, *J. Comb. Theory (A)* **20** (1976), 114–123.

- [12] The dimension of planar posets, *J. Comb. Theory (B)* **21** (1977), 51–67 (with J. I. Moore).
- [13] Some theorems on graphs and posets, *Discrete Math.* **15** (1976), 79–84 (with J. I. Moore).
- [14] Characterization problems for graphs, partially ordered sets, lattices, and families of sets, *Discrete Math.* **16** (1976), 361–381 (with J. I. Moore).
- [15] Maximal dimensional partially ordered sets III: A characterization of Hiraguchi’s inequality for interval dimension, *Discrete Math.* **15** (1976), 389–400 (with K. P. Bogart).
- [16] On the complexity of posets, *Discrete Math.* **16** (1976), 71–82 (with K. P. Bogart).
- [17] The dimension of a comparability graph, *Proc. Amer. Math. Soc.* **60** (1976), 35–38 (with J. I. Moore and D. P. Sumner).
- [18] Order preserving embeddings of aographs, in *Theory and Applications of Graphs*, Springer-Verlag, **642** (1978), 572–579.
- [19] Combinatorial problems in dimension theory for partially ordered Sets, in *Problemes Combinatoires et Theorie des Graphes*, Colloque International C.N.R.S. **260** (1978), 403–406.
- [20] Some combinatorial problems for permutations, *Congressus Numerantium* **19** (1978), 619–632.
- [21] When the cartesian product of directed cycles is hamiltonian, *J. Graph Theory* **2** (1979), 137–142 (with P. Erdős).
- [22] On double and multiple interval graphs, *J. Graph Theory* **3** (1979), 205–211 (with F. Harary).
- [23] A forbidden subgraph characterization of Roberts’ inequality for boxicity, *Discrete Math.* **28** (1979), 303–313.
- [24] Large minimal realizers of a partial order II, *Discrete Math.* **31** (1980), 297–314 (with S. Maurer and I. Rabinovitch).
- [25] A generalization of Turán’s theorem to directed graphs, *Discrete Math.* **32** (1980), 167–189 (with S. Maurer and I. Rabinovitch).
- [26] Partially ordered sets with equal rank and dimension, *Congressus Numerantium* **29** (1980), 627–637 (with S. Maurer and I. Rabinovitch).
- [27] A bound on the interval number of a complete multipartite graph, in *The Theory and Applications of Graphs*, G. Chartrand et al., eds., Wiley Interscience (1981), 397–407 (with L. Hopkins).

- [28] Stacks and splits of partially ordered sets, *Discrete Math.* **35** (1981), 220–256.
- [29] An extremal problem in recursive combinatorics, *Congressus Numerantium* **33** (1981), 143–153 (with H. Kierstead).
- [30] Combinatorial problems for graphs and matrices, *Discrete Math.* **39** (1982), 87–101 (with T. Monroe).
- [31] Dimension theory for ordered sets, in *Proceedings of the Symposium on Ordered Sets*, I. Rival et al., eds., Reidel Publishing (1982), 171–212 (with D. Kelly).
- [32] Every t -irreducible partial order is a subposet of a $t+1$ -irreducible partial order, *Annals of Discrete Math.* **17** (1983), 613–621 (with J. Ross).
- [33] The Ramsey number of a graph with bounded maximum degree, *J. of Comb. Theory (B)* **34** (1983), 239–243 (with V. Chvatál, V. Rödl, and E. Szemerédi).
- [34] On determinism versus non-determinism and related problems, in *Proceedings of the 24th Annual Symposium on Foundations of Computer Science* (1983), 429–438 (with W. Paul, N. Pippenger and E. Szemerédi).
- [35] Graphs and partially ordered sets, in *Selected Topics in Graph Theory II*, R. Wilson and L. Beineke, eds., Academic Press (1983), 237–268.
- [36] Recent progress in problems in discrete geometry, in *Graphs and Other Combinatorial Topics*, Tüebner-Texte Zur Mathematik **59** (1983), 316–319 (with E. Szemerédi).
- [37] A combinatorial distinction between the euclidean and projective planes, *European J. of Comb.* **4** (1983), 385–394 (with E. Szemerédi).
- [38] Extremal problems in discrete geometry, *Combinatorica* **3** (1983), 381–392 (with E. Szemerédi).
- [39] The interval number of a complete multipartite graph, *Discrete Applied Math.* **18** (1984), 163–189 (with L. Hopkins and D. West).
- [40] A sperner theorem on unrelated chains of subsets, *J. Comb. Theory A* **36** (1984), 124–127 (with J. Griggs and J. Stahl).
- [41] Regressions and monotone chains: A ramsey-type extremal problem for partial orders, *Combinatorica* **4** (1984), 117–119 (with D. West, P. Schor and G. W. Peck).
- [42] A theory of dimension for recursive ordered sets, *Order* **1** (1984), 67–82 (with H. Kierstead and G. McNulty).

- [43] Tolerance graphs, *Discrete Applied Math.* **8** (1984), 157–170 (with C. Monma and M. Golumbic).
- [44] Unit distances in the euclidean plane, in *Graph Theory and Combinatorics*, B. Bollobás, ed., Academic Press (1984), 293–303 (with J. Spencer and E. Szemerédi).
- [45] The chromatic number of graphs with locally small chromatic number, *Combinatorica* **4** (1984), 183–185 (with H. Kierstead and E. Szemerédi).
- [46] Triangle-free graphs with restricted bandwidth, in *Progress in Graph Theory*, A. Bondy and R. Murty, eds., Academic Press (1984), 175–190 (with F. R. K. Chung).
- [47] The maximum number of edges in a strongly connected oriented graph without long directed paths, *Congressus Numerantium* **45** (1984), 19–25 (with M. Paoli).
- [48] For $t \geq 3$, every t -dimensional partial order can be embedded in a $t + 1$ -irreducible partial order, in *Finite and Infinite Sets*, A. Hajnal, L. Lovász, and V. T. Sös, eds., Colloq. Math. Soc. J. Bolyai **37** (1984), 711–732 (with J. Ross).
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- [51] Graphs and orders in ramsey theory and in dimension theory, in *Graphs and Order*, I. Rival, ed., Reidel (1985), 351–394 (with M. Paoli and J. Walker).
- [52] Angle orders, *Order* **1** (1985), 333–343 (with P. C. Fishburn).
- [53] Inequalities for the greedy dimension of ordered sets, *Order* **2** (1985), 145–164 (with H. Kierstead).
- [54] A generalization of threshold graphs with tolerance, *Congressus Numerantium* **55** (1986) 187–197 (with C. Monma and B. Reed).
- [55] A ramsey-theoretic problem for finite ordered sets, *Discrete Math.* **63** (1987), 217–223 (with H. Kierstead).
- [56] Arithmetic progressions in partially ordered sets, *Order* **4**, (1987), 37–42 (with P. M. Winkler).
- [57] Regressions and monotone chains II: The poset of integer intervals, *Order* **4**, (1987), 217–223 (with N. Alon and D. West).

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- [59] A note on ranking functions, *Discrete Math.* **67** (1987), 307–309 (with V. Rödl).
- [60] Representing an ordered set as the intersection of super-greedy linear extensions, *Order* **4** (1987), 293–311 (with H. Kierstead and B. Zhou).
- [61] Interval graphs, interval orders, and their generalizations, in *Applications of Discrete Mathematics*, R. Ringeisen and F. Roberts, eds., SIAM, Philadelphia, PA (1988), 45–58.
- [62] Explicit matchings in the middle two levels of a boolean algebra, *Order* **5** (1988), 163–171 (with H. Kierstead).
- [63] Threshold tolerance graphs, *J. Graph Theory* **12** (1988), 343–362 (with C. Monma, M. Saks, and B. Reed).
- [64] Problems and conjectures in the combinatorial theory of ordered sets, *Annals of Discrete Math.* **41** (1989), 401–416.
- [65] On-line partitioning of partially ordered sets, *College Mathematics Journal* **20** (1989), 124–131.
- [66] Super-greedy linear extensions of ordered sets, in *Combinatorial Mathematics*, G. Bloom et al., eds., *Annals of NY Acad. Sci.* **555** (1989), 262–271 (with H. Kierstead).
- [67] An on-line graph coloring algorithm with sublinear performance ratio, *Discrete Math.* **75** (1989), 319–325 (with L. Lovász and M. Saks).
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- [69] The maximal number of edges in $2K_2$ -free graphs, *Discrete Math.* **81** (1990), 129–135 (with F. R. K. Chung, A. Gyárfás, and Z. Tuza).
- [70] Angle orders and zeroes, *Order* **7** (1990), 213–217, (with P. C. Fishburn).
- [71] A note on removable pairs, in *Graph Theory, Combinatorics and Applications, Vol. 2*, Y. Alavi et al., eds., John Wiley (1991), 739–742 (with H. Kierstead).
- [72] The dimension of random ordered sets, *Random Structures and Algorithms* **2** (1991), 253–275 (with P. Erdős and H. Kierstead).
- [73] Interval orders and shift graphs, in *Sets, Graphs and Numbers*, A. Hajnal and V. T. Sos, eds., Colloq. Math. Soc. Janos Bolyai **60** (1991) 297–313 (with Z. Füredi, P. Hajnal and V. Rödl).

- [74] Fibres and ordered set coloring, *J. Comb. Theory A* **58** (1991) 158–164 (with D. Duffus and H. Kierstead).
- [75] On the number of different distances, *Discrete and Computational Geometry* **7** (1992), 1–11 (with F. R. K. Chung and E. Szemerédi).
- [76] Linear extensions of semiorders: A maximization problem, *Discrete Math.* **103** (1992), 25–40 (with P. C. Fishburn).
- [77] On-line graph coloring, in *On-Line Algorithms*, L. McGeoch and D. Sleator, eds., DIMACS Series in Discrete Mathematics and Theoretical Computer Science (1992) 85–92 (with H. Kierstead).
- [78] Dimensions of hypergraphs, *J. Comb. Theory B* **56** (1992) 278–295 (with P. C. Fishburn).
- [79] Colorful induced subgraphs, *Discrete Math.* **101** (1992) 165–169 (with H. Kierstead).
- [80] The dimension of cycle-free orders, *Order* **9** (1992) 103–110 (with H. Kierstead and J. Qin).
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- [82] Balance theorems for height-2 posets, *Order* **9** (1992) 43–53 (with P. C. Fishburn and W. Gehrlein).
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- [84] The order dimension of convex polytopes, *SIAM J. Discrete Math.* **6** (1993), 230–245 (with G. R. Brightwell).
- [85] Induced matchings in cubic graphs, *J. Graph Theory* **17** (1993), 151–160 (with P. Horák and He Qing).
- [86] Balancing pairs in partially ordered sets, in *Combinatorics, Paul Erdős is Eighty*, Bolyai Society Mathematical Studies, 1993, 145–157 (with S. Felsner).
- [87] Posets with large dimension and relatively few critical pairs, *Order* **10** (1993) 317–328 (with P. C. Fishburn).
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- [112] Dimension, graph and hypergraph coloring, *Order* **17** (2000), 167–177 (with S. Felsner).
- [113] Spanning trees of bounded degree, *Electronic Journal of Combinatorics*, **8(1)** (2001) R33 (with A. Czygrinow, G. Fan, G. Hurlbert and H. Kierstead).
- [114] Competitive Colorings of Oriented Graphs, *Electronic Journal of Combinatorics*, **8(2)** (2001) R12 (with H. A. Kierstead).
- [115] A note on graph pebbling, *Graphs and Combinatorics*, **18** (2002), 219–225 (with A. Czygrinow, G. Hurlbert and H. Kierstead).
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- [119] Bar k -Visibility Graphs, *J. Graph Algorithms*, to appear (with A. Dean, W. Evans, E. Gethner, J. Laison and M. Safari).