

# Ryan R. Martin

## Publications

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### Submitted Publications:

- [75] R.R. Martin and B. Patkós, On a generalization of a result of Kleitman, submitted. (12pp.) [arXiv]
- [74] R.R. Martin and N. Veldt, Induced saturation of the poset  $2C_2$ , submitted. (11pp.) [arXiv]
- [73] R.R. Martin, M. Ruszinkó and G.N. Sárközy, B-colorings of planar and outerplanar graphs, submitted. (15pp.) [arXiv]
- [72] R.R. Martin and N. Veldt, Saturation of  $k$ -chains in the Boolean lattice, submitted. (10pp.) [arXiv]
- [71] E. Györi, R.R. Martin, A. Paulos, C. Tompkins, and K. Varga, On the rainbow planar Turán number of paths, submitted. (22pp.) [arXiv]

### Publications to appear:

- [70] E. Heath, R.R. Martin, and C. Wells, The maximum number of odd cycles in a planar graph, *J. Graph Theory*, to appear. (33pp.) [arXiv]
- [69] R.R. Martin and B. Patkós, A note on the Erdős matching conjecture, *Studia Sci. Math. Hungar.*, to appear. (5pp.) [arXiv]
- [68] M. Axenovich, R.R. Martin, and C. Winter, On graphs embeddable in a layer of a hypercube and their extremal numbers, *Ann. Comb.* (2024) published online. (21pp.)  
DOI:10.1007/s00026-024-00705-2 [arXiv]

### Journal Publications:

- [67] A. Gyárfás, R.R. Martin, M. Ruszinkó and G.N. Sárközy, Proper colorings of planar graphs with rainbow  $C_4$ -s, *J. Graph Theory* 107 (2024), no. 4, 833–846. DOI:10.1002/jgt.23163 [arXiv]
- [66] M. Bóna and R.R. Martin, The endomorphism conjecture for graded posets of width 4, *Studia Sci. Math. Hungar.* 60 (2023), no. 2-3, 133–142. DOI:10.1556/012.2023.01540 [arXiv]
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- [64] C. Cox and R.R. Martin, Counting paths, cycles and blow-ups in planar graphs, *J. Graph Theory* 101 (2022), no. 3, 521–558. DOI:10.1002/jgt.22838 [arXiv]  
\*Top 10% of papers at *J. Graph Theory* in 2022 (number of downloads within 12 months of publication).
- [63] D. Ghosh, E. Györi, R.R. Martin, A. Paulos, and C. Xiao, Planar Turán number of the 6-cycle, *SIAM J. Discrete Math.* 36 (2022), no. 3, 2028–2050. DOI:10.1137/21M140657X [arXiv]
- [62] A. Blumenthal, B. Lidický, R.R. Martin, S. Norin, F. Pfender and J. Volec, Counterexamples to a conjecture of Harris on Hall ratio, *SIAM J. Discrete Math.* 36 (2022), no. 3, 1678–1686. DOI:10.1137/18M1229420 [arXiv]
- [61] J. Balogh, R.R. Martin, D.T. Nagy, and B. Patkós, On generalized Turán results in height two posets, *SIAM J. Discrete Math.*, 36 (2022), no. 2, 1483–1495. DOI:10.1137/21M1457254 [arXiv]

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- [59] A. London, R.R. Martin, and A. Pluhár, Graph clustering via generalized colorings, *Theoret. Comput. Sci.* 918 (2022), 94–104. DOI:10.1016/j.tcs.2022.03.023 [arXiv]
- [58] R.R. Martin and A.W.N. Riasanovsky, On the edit distance function of the random graph, *Combin. Probab. Comput.* 31 (2022), no. 2, 345–367. DOI:10.1017/S0963548321000353 [arXiv]
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- [55] M. Axenovich and R.R. Martin, Splits with forbidden subgraphs, *Discrete Math.* 345 (2022), no. 2, Paper No. 112689, 8pp. DOI:10.1016/j.disc.2021.112689 [arXiv]
- [54] B. Keszegh, N. Lemons, R.R. Martin, D. Pálvölgyi, and B. Patkós, Induced and non-induced poset saturation problems, *J. Combin. Theory Ser. A* 184 (2021), Paper No. 105497, 20pp. DOI:10.1016/j.jcta.2021.105497 [arXiv]
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- [50] M. Dairyko, M. Ferrara, B. Lidický, R.R. Martin, F. Pfender, and A. Uzzell, Ore and Chvátal-type degree conditions for bootstrap percolation from small sets, *J. Graph Theory* 94 (2020), no. 2, 252–266. DOI:10.1002/jgt.22517 [arXiv]
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- [48] J. Kim, R.R. Martin, T. Masařík, W. Shull, H.C. Smith, A. Uzzell, and Z. Wang, On difference graphs and the local dimension of posets, *European J. Combin.* 86 (2020), 103074, 13pp. DOI:10.1016/j.ejc.2019.103074 [arXiv]

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- [28] A. Csernenszky, R.R. Martin, and A. Pluhár, On the complexity of Chooser-Picker positional games, *Integers* 11 (2011), Paper No. G02, 16pp. DOI:10.1515/integ.2011.113 [arXiv]  
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- [18] J. Balogh and R.R. Martin, Edit distance and its computation, *Electron. J. Combin.* 15 (2008), no. 1, Research Paper 20, 27pp. DOI:10.37236/744 [arXiv]
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### Book Chapter:

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### Extended Abstracts:

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- A. Frieze, R.R. Martin, J. Moncel, M. Ruzinkó, and C. Smyth, Identifying codes in random networks (extended abstract), *Proceedings of the 2005 IEEE International Symposium on Information Theory (Adelaide, Australia, 2005)* (2005), 1461–1467. [PrePrint]
- R.R. Martin (based on joint work with Cs. Magyar), Tripartite version of the Corrádi-Hajnal Theorem (extended abstract), *Paul Erdős and his mathematics (Budapest, 1999)*, 166–168, *János Bolyai Math. Soc., Budapest*, 1999.

### arXiv Manuscript:

- M. Axenovich and R.R. Martin, A version of Szemerédi's regularity lemma for multicolored graphs and directed graphs that is suitable for induced graphs, 2011. [arXiv]

### Dissertations:

- On graph packing, induced subgraphs and intersecting hypergraphs, Ph. D. dissertation, Rutgers, the State University of New Jersey, October 2000. (159pp.) [Thesis]
- Minimum expected time of random walks on rooted trees, Senior thesis, University of Delaware, May 1995. (63pp.)