

# Ryan R. Martin

## Publications

---

IN ACRBAT READER, CLICK THE TITLE TO SEE THE PAPER OR [ARXIV] FOR A LINK TO THE PREPRINT.  
PUBLICATION LIST AND CV AVAILABLE AT MY WEBSITE.

### Submitted Publications:

- [50] Zh. Berikkyzy, R.R. Martin, and C. Peck, On the edit distance of powers of cycles, submitted, 21pp. [arXiv]
- [49] 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, submitted, 13pp. [arXiv]
- [48] R.R. Martin, A. Methuku, A. Uzzell, and S. Walker, A simple discharging method for forbidden subposet problems, submitted, 8pp. [arXiv]
- [47] 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, submitted, 14pp. [arXiv]
- [46] M. Axenovich, J. Goldwasser, R. Hansen, B. Lidický, R.R. Martin, D. Offner, J. Talbot, and M. Young, Polychromatic colorings on the integers, submitted, 16pp. [arXiv]
- [45] J. Goldwasser, B. Lidický, R.R. Martin, D. Offner, J. Talbot, and M. Young, Polychromatic colorings on the hypercube, submitted, 22pp. [arXiv]

### Publications to appear:

- [44] A. Bernshteyn, O. Khormali, R.R. Martin, J. Rollin, D. Rorabaugh, S. Shan, and A. Uzzell, Regular colorings and factors of regular graphs, *Discuss. Math. Graph Theory*, to appear, 20pp. [arXiv]
- [43] C. Erbes, M. Ferrara, R.R. Martin, and P. Wenger, Stability of the potential function, *SIAM J. Discrete Math.*, to appear, 20pp.
- [42] C. Erbes, M. Ferrara, R.R. Martin, and P. Wenger, On the approximate shape of degree sequences that are not potentially  $H$ -graphic, *J. Comb.*, to appear, 19pp. [arXiv]

### Journal Publications:

- [41] M. Axenovich, J. Goldwasser, R. Hansen, B. Lidický, R.R. Martin, D. Offner, J. Talbot, and M. Young, Polychromatic colorings of complete graphs with respect to 1-,2-factors and Hamiltonian cycles, *J. Graph Theory*, **87** (2018), 660-671. DOI:10.1002/jgt.22180 [Journal Copy] [arXiv]
- [40] M. Ferrara, B. Kay, L. Kramer, R.R. Martin, B. Reiniger, H. Smith, and E. Sullivan, The saturation number of induced subposets of the Boolean lattice, *Discrete Math.*, **340**(10) (2017), 2479–2487. DOI:10.1016/j.disc.2017.06.010 [Journal Copy] [arXiv]
- [39] R.R. Martin, R. Mycroft, and J. Skokan, An asymptotic multipartite Kühn-Osthus theorem, *SIAM J. Discrete Math.*, **31**(3) (2017), 1498–1513. DOI:10.1137/16M1070621 [Journal Copy] [arXiv]
- [38] R.R. Martin and J. Skokan, Asymptotic multipartite version of the Alon-Yuster theorem, *J. Combin. Theory Ser. B*, **127** (2017), 32–52. DOI:10.1016/j.jctb.2017.05.004 [Journal Copy] [arXiv]
- [37] R.R. Martin and S. Walker, A note on the size of  $N$ -free families, *Eur. J. Math.* **3**(2) (2017), 429–432. DOI:10.1007/s40879-017-0139-3 [Journal Copy] [arXiv]

# Ryan R. Martin

---

## Publications (cont.)

### Journal Publications (cont.):

- [36] J. Balogh, B. Csaba, R.R. Martin, and A. Pluhár, On the path separation number of graphs, *Discrete Appl. Math.* **213** (2016), 26–33. DOI:10.1016/j.dam.2016.05.022 [Journal Copy] [arXiv]
- [35] S. Butler, C. Erickson, L. Hogben, K. Hogenson, L. Kramer, R.L. Kramer, J.C.-H. Lin, R.R. Martin, D. Stolee, N. Warnberg, and M. Young, Rainbow arithmetic progressions, *J. Comb.* **7**(4) (2016), 595–626. DOI:10.4310/JOC.2016.v7.n4.a3 [Journal Copy] [arXiv]
- [34] R.R. Martin, On the computation of edit distance functions, *Discrete Math.* **338**(2) (2015), 291–305. DOI:10.1016/j.disc.2014.09.005 [Journal Copy] [arXiv]
- [33] R.R. Martin and T. McKay, On the edit distance from  $K_{2,t}$ -free graphs, *J. Graph Theory* **77**(2) (2014) 117–143. DOI:10.1002/jgt.21777 [Journal Copy] [arXiv extended version]
- [32] M. Axenovich, R.R. Martin, and T. Ueckerdt, Twins in graphs, *European J. Combin.* **39** (2014), 188–197. DOI:10.1016/j.ejc.2014.01.007 [Journal Copy] [arXiv]
- [31] R.R. Martin, The edit distance function and symmetrization, *Electron. J. Combin.* **20**(3) (2013), Research Paper 26, 25pp. [Journal Copy] [arXiv]
- [30] L. Kramer, R.R. Martin, and M. Young, On diamond-free subposets of the Boolean lattice, *J. Combin. Theory Ser. A* **120**(3) (2013), 545–560. DOI:10.1016/j.jcta.2012.11.002 [Journal Copy] [arXiv]
- [29] R.R. Martin and J. Smith, Induced saturation number, *Discrete Math.* **312**(21) (2012), 3096–3106. DOI:10.1016/j.disc.2012.06.015 [Journal Copy] [arXiv]
- [28] M. Axenovich, J. Manske, and R.R. Martin,  $Q_2$ -free families in the Boolean lattice, *Order* **29**(1) (2012), 177–191. DOI:10.1007/s11083-012-9263-3 [Journal Copy] [arXiv]
- [27] M. Axenovich and R.R. Martin, Multicolor and directed edit distance, *J. Comb.* **2**(4) (2011), 525–556. DOI:10.4310/JOC.2011.v2.n4.a4 [Journal Copy] [arXiv]
- [26] A. Csernenszky, R.R. Martin, and A. Pluhár, On the complexity of Chooser-Picker positional games, *Integers* **11** (2011), Research Paper G2, 16pp. DOI:10.1515/integ.2011.113 [Journal Copy] [arXiv]
- [25] R.R. Martin and B. Stanton, Lower bounds for identifying codes in some infinite grids, *Electron. J. Combin.* **17**(1) (2010), Research Paper 122, 16pp. [Journal Copy] [arXiv]
- [24] T. Hall, L. Hogben, R.R. Martin, and B. Shader, Expected values of parameters associated with the minimum rank of a graph, *Linear Algebra Appl.* **433**(1) (2010), 101–117. DOI:10.1016/j.laa.2010.01.036 [Journal Copy] [arXiv]
- [23] R.R. Martin and Y. Zhao, Tiling tripartite graphs with 3-colorable graphs, *Electron. J. Combin.* **16**(1) (2009), Research Paper 109, 16pp. [Journal Copy] [arXiv]
- [22] J. Balogh, R.R. Martin, and A. Pluhár, The diameter game, *Random Structures Algorithms* **35**(3) (2009), 369–389. DOI:10.1002/rsa.20280 [Journal Copy] [arXiv]
- [21] J. Balogh and R.R. Martin, On Avoider-Enforcer games, *SIAM J. Discrete Math.* **23**(2) (2009), 901–908. DOI:10.1137/080721716 [Journal Copy] [arXiv]
- [20] M. Axenovich, A. Kézdy, and R.R. Martin, On the editing distance of graphs, *J. Graph Theory* **58**(2) (2008), 123–138. DOI:10.1002/jgt.20296 [Journal Copy] [arXiv]

# Ryan R. Martin

---

## Publications (cont.)

### Journal Publications (cont.):

- [19] J. Balogh and R.R. Martin, Edit distance and its computation, *Electron. J. Combin.* **15**(1) (2008), Research Paper 20, 27pp. [Journal Copy] [arXiv]
- [18] M. Axenovich and R.R. Martin, Avoiding rainbow induced subgraphs in vertex-colorings, *Electron. J. Combin.* **15**(1) (2008), Research Paper 12, 23pp. [Journal Copy] [arXiv]
- [17] R.R. Martin and E. Szemerédi, Quadripartite version of the Hajnal-Szemerédi theorem, *Discrete Math.* **308**(19) (2008), 4337–4360. DOI:10.1016/j.disc.2007.08.019 [Journal Copy]
- [16] M. Axenovich and R.R. Martin, On weighted Ramsey numbers, *Australas. J. Combin.* **38** (2007), 179–194. [Journal Copy] [arXiv]
- [15] A. Frieze, R.R. Martin, J. Moncel, M. Ruszinkó, and C. Smyth, Codes identifying sets of vertices in random networks, *Discrete Math.* **307**(10) (2007), 1094–1107. DOI: 10.1016/j.disc.2006.07.041 [Journal Copy]
- [14] T. Bohman, A. Frieze, R.R. Martin, M. Ruszinkó, and C. Smyth, On randomly generated intersecting hypergraphs II, *Random Structures Algorithms* **30**(1) (2007), 17–34. DOI:10.1002/rsa.20152 [Journal Copy] [arXiv]
- [13] M. Axenovich and R.R. Martin, Sub-Ramsey numbers for arithmetic progressions, *Graphs Combin.* **22**(3) (2006), 297–309. DOI:10.1007/s00373-006-0663-2 [Journal Copy] [arXiv]
- [12] M. Axenovich and R.R. Martin, A note on short cycles in a hypercube, *Discrete Math.* **306**(18) (2006), 2212–2218. DOI:10.1016/j.disc.2006.05.008 [Journal Copy] [arXiv]
- [11] M. Axenovich and R.R. Martin, On the strong chromatic number of graphs, *SIAM J. Discrete Math.* **20**(3) (2006), 741–747. DOI:10.1137/050633056 [Journal Copy] [arXiv]
- [10] M. Axenovich and R.R. Martin, Avoiding patterns in matrices via a small number of changes, *SIAM J. Discrete Math.*, **20**(1) (2006), 49–54. DOI:10.1137/S0895480104445150 [Journal Copy] [arXiv]
- [9] R.R. Martin, A note on a conjecture of Gyárfás, *Ars Combin.* **79** (2006), 311–317. [arXiv]
- [8] T. Bohman, A. Frieze, M. Krivelevich, and R.R. Martin, Adding random edges to dense graphs, *Random Structures Algorithms* **24**(2) (2004), 105–117. DOI:10.1002/rsa.10112 [Journal Copy] [arXiv]
- [7] A. Frieze, M. Krivelevich, and R.R. Martin, The emergence of a giant component in random subgraphs of pseudo-random graphs, *Random Structures Algorithms* **24**(1) (2004), 42–50. DOI:10.1002/rsa.10100 [Journal Copy] [arXiv]
- [6] T. Bohman, C. Cooper, A. Frieze, R.R. Martin, and M. Ruszinkó, On randomly generated intersecting hypergraphs, *Electron. J. Combin.* **10** (2003), Research Paper 29, 10pp. [Journal Copy] [arXiv]
- [5] T. Bohman and R.R. Martin, A note on  $G$ -intersecting families, *Discrete Math.* **260** (2003), no. 1-3, 183–188. DOI:10.1016/s0012-365x(02)00761-6 [Journal Copy] [arXiv]
- [4] T. Bohman, A. Frieze, and R.R. Martin, How many random edges make a dense graph hamiltonian?, *Random Structures Algorithms* **22**(1) (2003), 33–42. DOI:10.1007/bf02579348 [Journal Copy] [arXiv]

# Ryan R. Martin

---

## Publications (cont.)

### Journal publications (cont.):

- [3] Cs. Magyar and R.R. Martin, Tripartite version of the Corrádi-Hajnal theorem, *Discrete Math.* **254** (2002), no. 1-3, 289–308. DOI:10.1016/S0012-365X(01)00373-9 [Journal Copy] [arXiv]
- [2] F. Lazebnik, W. Li, and R.R. Martin, Random walks on rooted trees, *Bull. Inst. Combin. Appl.* **22** (1998), 59–66. [PrePrint]
- [1] J. Benashski, R.R. Martin, J. Moore, and L. Traldi, On the  $\beta$ -invariant for graphs, Proceedings of the Twenty-sixth Southeastern International Conference on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 1995). *Congr. Numer.* **109** (1995), 211–221. [PrePrint]

### Book Chapter:

- R.R. Martin, The edit distance in graphs: methods, results and generalizations, *Recent Trends in Combinatorics*, 31–62, IMA Vol. Math. Appl., **159**, Springer, Cham, 2016. DOI:10.1007/978-3-319-24298-9\_2 [Chapter Copy] [PrePrint] [ERRATA]

### Extended Abstracts:

- R.R. Martin (based on joint work with J. Balogh and A. Pluhár), The diameter game (extended abstract), in *Oberwolfach Reports* **4**(2) (2007) 1073–1114. [PrePrint]
- 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:

- K. Hogenson, R.R. Martin, and Y. Zhao, Tiling tripartite graphs with 3-colorable graphs: The extreme case, submitted, 27pp. [arXiv]
- 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 University, October 2000, 159pp. [Thesis]
- Minimum expected time of random walks on rooted trees, Senior thesis, University of Delaware, May 1995, 63pp.