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Curriculum Vitae

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Research Interests: Graph Theory, Hypergraphs, Extremal Graph Theory, Probabilistic Methods, Computational Complexity

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Postdoc: *August 2013-August 2017* University of Illinois at Urbana-Champaign { J. L. Doob postdoc

PhD: *August 2013* Arizona State University
    Advisors: A. Czygrinow and H.A Kierstead
    Title: *Tiling Directed Graphs with Cycles and Tournaments*

Current Grant: *7/2018 thru 7/2021*, NSF Grant $113,703
    Title: *Factors in Graphs and Related Combinatorial Structures*

Publications

Published or Accepted

(1) *Cyclic Triangle Factors in Regular Tournaments* The Electronic Journal of Combinatorics (2019) P4.24. (with L. Li) http://www.combinatorics.org/ojs/index.php/eljc/article/view/v26i4p24

(2) *Disjoint cycles and chorded cycles in graphs with given minimum degree* (accepted by Discrete Math. 2019) (with M. Santana and E. Yeager)

(3) *Long rainbow cycles and Hamiltonian cycles using many colors in properly edge-colored complete graphs* European Journal of Combinatorics (June 2019) 140{151 (with J. Balogh) https://doi.org/10.1016/j.ejc.2019.02.008

(4) *An algorithmic answer to the Ore-type version of Dirac's question on disjoint cycles* Optimization Problems in Graph Theory (2018) (book chapter) (with H.A. Kierstead, A. Kostochka and D. Yager) https://doi.org/10.1007/978-3-319-94830-0

(5) *Tiling directed graphs with tournaments* Forum of Mathematics, Sigma, 6 (2018), e2 (with A. Czygrinow, L. DeBiasio and A. Treglown) https://doi.org/10.1017/fms.2018.2

(6) *Triangle-tilings in graphs without large independent sets*, Combinatorics, Probability and Computing (July 2018) 449{474 (with J. Balogh, A. McDowell and R. Mycroft) https://doi.org/10.1017/S0963548318000196

(7) *Spanning trees with leaf distance at least d*, Discrete Math (June 2017) 1412-1418 (with C. Erbes, S. Mousley, and M. Santana). https://doi.org/10.1016/j.disc.2016.09.027

(8) *Transitive triangle-tilings in oriented graphs*, Journal of Combinatorial Theory, Series B (May 2017) 64{87 (with J. Balogh and A. Lo). `https://doi.org/10.1016/j.jctb.2016.12.004`

(9) *A re nement of theorems on vertex disjoint chorded cycles*, Graphs and Combinatorics (January 2017) 181-201 (with M. Santana and E. Yeager). `https://doi.org/10.1007/s00373-016-1749-0`

(10) *Sharpening an Ore-type version of the Corradi-Hajnal theorem*, Abhandlungen aus dem Mathematischen Seminar der Universität Hamburg (October 2017) 299{335 (with H.A. Kierstead, A. Kostochka, and E. Yeager). `https://doi.org/10.1007/s12188-016-0168-8`

(11) *Triangle factors of graphs without large independent sets and of weighted graphs*, Random Structures & Algorithms (December 2016) 669{693 (with J. Balogh and M. Sharifzadeh and Appendix by C. Reiher and M. Schacht). `https://doi.org/10.1002/rsa.20670`

(12) *Increasing paths in edge-ordered graphs: the hypercube and random graphs*, The Electronic Journal of Combinatorics (2016) P2.15. (with J. De Silva, F. Pfender, T. Retter and M. Tait) `http://www.combinatorics.org/ojs/index.php/eljc/article/view/v23i2p15`

(13) *The semi-degree threshold for anti-directed Hamilton cycles*, The Electronic Journal of Combinatorics (2015) P4.34. (with L. DeBiasio) `http://www.combinatorics.org/ojs/index.php/eljc/article/view/v22i4p34`

(14) *Arbitrary orientations of Hamilton cycles in digraphs*, SIAM J. Discrete Math. (2015), 29-3, 1553{1584. (with L. DeBiasio, D. Kühn, D. Osthus and A. Taylor) `https://doi.org/10.1137/140974675`

(15) *An extension of the Hajnal-Szemeredi theorem to directed graphs*, Combinatorics, Probability and Computing. (September 2015) 754{773. (with A. Czygrinow, L. DeBiasio and H.A. Kierstead) `https://doi.org/10.1017/S0963548314000716`

(16) *On directed versions of the Corradi-Hajnal corollary*, European Journal of Combinatorics (November 2014) 1{14. (with A. Czygrinow and H.A. Kierstead) `https://doi.org/10.1016/j.ejc.2014.05.006`

(17) *T17-284(A)50(orde)50(gr)50(e)50(e)-4285Aordixton Aor Aexiteanc50(e)-428(of)-3285Alo50(ors)-428(oa*

Transitive tournament tilings in oriented graph with large total degree, AMS Spring Western Sectional Meeting, Special Session on Structural Graph Theory, March 23, 2019

Rainbow cycles in edge{colored graphs with large minimum color degree, AMS Spring Southeastern Sectional Meeting, Special Session on Recent Development in Graph Theory, March 16, 2019

Rainbow cycles in edge-colored graphs with large minimum color degree, 4th Annual Mostly Manitoba, Michigan and Minnesota Combinatorics Graduate Students Workshop, September 9, 2018.

Vertex-disjoint cycles in graphs and directed graphs   Vertex-disjoint cyclesFnt