Iowa State University Mathematics REU Publications

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References

[1] Ghanshyam Bhatt, Lorraine Kraus, Laura Walters, Eric Weber, On Hiding Messages in the Oversampled Fourier Coefficients, *Journal of Mathematical Analysis and Applications* 320 (2006), pp. 492–498. (2004 REU)

[2] G. Bhattacharyya, J. Hegeman, J. Kim, J. Langford, S. Y. Song, Some Existence and Construction Results of Polygonal Designs, *European Journal of Combinatorics* 29 (2008) pp. 1396–1407. (2004 REU)

[3] John Bowers, Job Evers, Leslie Hogben, Steve Shaner, Karyn Snider, Amy Wangsness. On completion problems for various classes of P-matrices. *Linear Algebra and its Applications* 413 (2006) 342–354. (2003 and 2004 REU)

[4] D.Doan, B.Kivunge, J.J.Poole, J.D.H. Smith, T. Sykes, M.Teplitskiy. Partial semigroups and and primality indicators in the fractal generation of binomial coefficients to a prime square modulus. *Demonstratio Mathematica* 42 (2009), pp. 23–39. (2003 and 2004 REU)

[5] Jose Ayala-Hoffman, Patrick Corbin, Fritz Colonius, Wolfgang Kliemann, Kelly McConville, Justin R. Peters. Morse Decompositions, Attractors and Chain Recurrence. *Proyecciones* 25 (2006), 79–110. (2005 REU)

[6] Atoshi Chowdhury, Leslie Hogben, Rana Mikkelson, Jude Melancon. Rational Realization of Maximum Eigenvalue Multiplicity of Symmetric Tree Sign Patterns. *Linear Algebra and its Applications* 418 (2006), pp. 380–393. (2005 REU)

[7] Justin P. Peters, Khalid Boushaba, Marit Nilsen-Hamilton. A Mathematical Model for Fibroblast Growth Factor Competition Based on Enzyme Kinetics. *Mathematical Biosciences and Engineering* 2 (2005), pp. 789–810. (2005 REU)

[8] Nathan L. Chenette, Sean V. Droms, Leslie Hogben, Rana Mikkelson, Olga Pryporova. Minimum Rank Of A Tree Over An Arbitrary Field. *Electronic Journal of Linear Algebra* 16 (2007), pp.183–186. (2006 REU)

[9] Stephen Dupal, Michael Yoshizawa. Design and Optimization of Explicit Runge-Kutta Formulas, *Rose-Hulman Undergraduate Mathematics Journal* 8 (2007). (2006 REU)

[10] Yeon-Jung Seo, Shiliang Chen, Marit Nilsen-Hamilton, Howard A Levine. A mathematical analysis of multiple-target SELEX. *Bulletin of Mathematical Biology*, 72 (2010), pp. 1623–1665. (2006 REU)

[11] E. Almodovar, L. DeLoss, L. Hogben, K. Hogenson, K. Murphy, T. Peters, C. A. Ramirez. Minimum rank, maximum nullity and zero forcing number for selected graph families. *Involve: a journal of mathematics.* 3 (2010), pp. 371-392. (2009 REU)

[12] C. J. Edholm, L. Hogben, M. Huynh, J. LaGrange, D. D. Row. Vertex and edge spread of zero forcing number, maximum nullity, and minimum rank of a graph. *Linear Algebra and its Applications* 436 (2012), 4352–4372, 2012. (2009 REU)

[13] A.P. Ghosh, D. Hay, V. Hirpara, R. Rastegar, A. Roitershtein, A. Schulties, J. Suh. Random linear recursions with dependent coefficients. *Statistics and Probability Letters* 80 (2010), pp. 1597–1605. (2009 REU)

[14] D. Hay, R. Rastegar, A. Roitershtein. Multivariate linear recursions with Markov-dependent coefficients. *Journal of Multivariate Analysis* 102 (2011), pp. 521–527, 2011. (2009 REU)

[15] M. Archer, M. Catral, C. Erickson, R. Haber, L. Hogben, X. Martinez-Rivera, A. Ochoa. Constructions of potentially eventually positive sign patterns with reducible positive part. *Involve: a journal of mathematics* 4 (2011), pp. 405–410, 2011. (2010 REU)

[16] M. Archer, M. Catral, C. Erickson, R. Haber, L. Hogben, X. Martinez-Rivera, A. Ochoa. Potentially eventually exponentially positive sign patterns. *Involve: a journal of mathematics* 6 (2013), pp. 261–271 (2010 REU)

[17] K. Jungjaturapit, T. Pluta, R. Rastegar, A. Roitershtein, M. Temba, C. N. Vidden, B. Wu, Trading cookies in a gambler's ruin scenario, *Involve: a journal of mathematics* 6 (2013), pp. 191–220 (2010 REU).

[18] K. Ayers, X. Garcia, W. Kliemann, J. Kunze, T. Rudelius, A. Sanchez, S. Shao, E. Speranza, C. Vidden. Limit and Morse Sets for Deterministic Hybrid Systems. *Qualitative Theory of Dynamical Systems* 12 (2013), pp. 335–360. (2011 REU)

[19] K. Ayers, X. Garcia, W. Kliemann, J. Kunze, T. Rudelius, A. Sanchez, S. Shao, E. Speranza, C. Vidden. A Behavioral Characterization of Discrete Time Dynamical Systems over Directed Graphs. *Qualitative Theory of Dynamical Systems* 13 (2014),pp. 161–180. (2009 and 2011 REU)

[20] A. Berliner, M. Catral, L. Hogben, M. Huynh, K. Lied, M. Young. Minimum rank, maximum nullity, and zero forcing number of simple digraphs. *Electronic Journal of Linear Algebra* 26 (2013), pp. 762–780. (2011 REU)

[21] M. Catral, A. Cepek, L. Hogben, M. Huynh, K. Lazebnik, T. Peters, M. Young. Zero forcing number, maximum nullity, and path cover number of subdivided graphs. *Electronic Journal of Linear Algebra* 23 (2012), pp. 906–922. (2011 REU)

[22] J. Cyr, J. Ekstrand, N. Meyers, C. Peoples, J. Peters. Matrices over $C([a,b])$. *International J. of Contemporary Mathematical Sciences* 8 (2013), pp. 227–234. (2011 REU)

[23] L. Hogben, M. Huynh, S. Meyer, N. Kingsley, S. Walker, M. Young. Propagation time for zero forcing on a graph. *Discrete Applied Mathematics* 160 (2012), pp. 1994–2005. (2011 REU)

[24] A. Berliner, C. Brown, J. Carlson, N. Cox, L. Hogben, J. Hu, K. Jacobs, K. Manternach, T. Peters, N. Warnberg, M. Young. Path cover number, maximum nullity, and zero forcing

number of oriented graphs and other simple digraphs. *Involve: a journal of mathematics* 8 (2015), pp. 147–167. (2013 REU)

[25] E. Banaian, S. Butler, C. Cox, J. Davis, J. Landgraf, S. Ponce. A generalization of Eulerian numbers via rook placements. To appear in *Involve.* `http://arxiv.org/abs/1508.03673` (2015 REU)

[26] E. Banaian, S. Butler, C. Cox, J. Davis, J. Landgraf, S. Ponce. Counting prime juggling patterns. *Graphs and Combinatorics* 32 (2016), pp. 1675–1688. (2015 REU)

[27] C. Bozeman, M. Catral, B. Cook, Oscar E. González, C. Reinhart. On the tree cover number of a graph. To appear in *Involve.* `http://cbozeman.public.iastate.edu/files/Onthetreecovernumberofagraph.pdf` (2015 REU)