

BIBLIOGRAPHY TO ACCOMPANY “COMBINATORIAL LAPLACIANS”

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ABSTRACT. This is a bibliography to accompany the slides from my talk at the Southeast Texas Discrete Math & Applications Workshop at Texas A & M University at Galveston in October, 2009.

In general, a reference in the slides with a name and date has an obvious unique corresponding entry in the bibliography. There are two places where there might be some confusion. There are two articles written by Merris from 1994 (in addition to the article he cowrote with Grone, also in 1994!); “Merris ’94” in the slides refers to [Me94], while [Me94a] is not mentioned in the slides, but is described below. Also, there are two papers that I cowrote with Klivans and Martin, referred to in the slides, and in the bibliography, as “DKM ’09” (an article that will appear in November 2009) and “DKM” (a preprint that was posted to the arXiv in August 2009).

There are also two additional entries: Bollobás’ textbook [Bo98] is a good reference for the classical matrix-tree theorem on graphs; and Merris’ article [Me94a] has good general background material on Laplacians.

REFERENCES

- [Ad92] Ron Adin, “Counting colorful multi-dimensional trees”, *Combinatorica* **12**, no. 3 (1992), 247–260.
- [Bo76] Ethan Bolker, “Simplicial geometry and transportation polytopes”, *Trans. Amer. Math. Soc.* **217** (1976), 121–142.
- [Bo98] Béla Bollobás, *Modern Graph Theory*. Graduate Texts in Mathematics, 184. Springer, New York, 1998.
- [Ca89] Arthur Cayley, “A theorem on trees”, *Quart. J. Math.* **23** (1889), 376–378.
- [Du05] Art M. Duval, “A Common recursion for Laplacians of matroids and shifted simplicial complexes”, *Doc. Math.* **10** (2005), 583–618.
- [DKM09] Art M. Duval, Caroline J. Klivans, and Jeremy L. Martin, “Simplicial matrix-tree theorems”, *Trans. Amer. Math. Soc.* **2009**, no. 11 (2009), 6073–6114.
- [DKM] Art M. Duval, Caroline J. Klivans, and Jeremy L. Martin, “Cellular spanning trees and Laplacians of cubical complexes”, preprint arXiv:0908.1956v2 [math.CO].
- [DR02] Art M. Duval and Victor Reiner, “Shifted simplicial complexes are Laplacian integral”, *Trans. Amer. Math. Soc.* **354**, no. 11 (2002), 4313–4344.
- [GM94] Robert Grone and Russell Merris, “The Laplacian spectrum of a graph II”, *SIAM J. Disc. Math.* **7** (1994), 221–229.
- [Ka83] Gil Kalai, “Enumeration of \mathbf{Q} -acyclic simplicial complexes”, *Israel J. Math.* **45**, no. 4 (1983), 337–351.
- [Ka05] Nets Hawk Katz, “The Grone Merris conjecture and a quadratic eigenvalue problem”, preprint arXiv:math.CA/0512647.
- [Ko04] Woong Kook, “Recurrence relations for the spectrum polynomial of a matroid”, *Discrete Appl. Math.* **143**, no. 1–3 (2004), 312–317.
- [KRS00] Woong Kook, Victor Reiner, and Dennis Stanton, “Combinatorial Laplacians of matroid complexes”, *J. Amer. Math. Soc.* **13** (2000), 129–148.

- [MR03] Jeremy L. Martin and Victor Reiner, “Factorization of some weighted spanning tree enumerators”, *J. Combin. Theory Ser. A* **104**, no. 2 (2003), 287–300.
- [Me94] Russell Merris, “Degree maximal graphs are Laplacian integral”, *Lin. Alg. Appl.* **199** (1994), 381–389.
- [Me94a] Russell Merris, “Laplacian matrices of graphs: a survey”, *Lin. Alg. Appl.* **197/198** (1994), 143–176.
- [RW02] Jeffrey B. Remmel and S. Gill Williamson, “Spanning trees and function classes”, *Electron. J. Combin.* **9**, no. 1 (2002), Research Paper #R34, 24 pp.
- [St07] Tamon Stephen, “A majorization bound for the eigenvalues of some graph Laplacians”, *SIAM J. Discrete Math.* **21**, no. 2 (2007), 303–312.

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