BIBLIOGRAPHY ON THE SIGNLESS LAPLACIAN EIGENVALUES

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References

Before 2002

[1] Lihtenbaum L.M., A duality theorem for simple graphs (Russian), *Usp. Mat. Nauk.* 18 (1958), No. 5. 185-190.

[2] Lihtenbaum L.M., Traces of powers of the vertex- and edge- neighbourhood matrix of a simple graph (Russian), *Izv. Viss. Ucebn. Zav. Mat.* 5 (1959), 154-163.

[3] Vahovskiĭ E.V., On the eigenvalues of the neighbourhood matrix of simple graphs (Russian), *Sibir. Mat. J.* 6 (1965), 44-49.

[4] McKay B.D., On the spectral characterization of trees, *Ars Combinatoria*, 3(1977), 219-232.

[5] Dedo E., La reconstruibilita del polinomio carrateristico del comutato di un grafo, *Boll. Unione Mat. Ital.* 18A (1981), No. 5, 423-429.

[6] Faria I., Permanental roots and the star degree of a graph, *Linear Algebra Appl.* 64 (1985), 255-265.

[7] Grone R., Merris R., Sunder V.S., The Laplacian spectrum of a graph, *SIAM J. Matrix Anal. Appl.* 11 (1990), 218-238.

[8] Desai M., Rao V., A characterization of the smallest eigenvalue of a graph, *J. Graph Theory* 18 (1994), 181-194.

[9] Grossman J.W., Kulkarni D.M., Schochetman I.E., Algebraic graph theory without orientation, *Linear Algebra Appl.*, 212/213(1994), 289-307.

[10] Cvetković D., Doob M., Sachs H., *Spectra of Graphs*, 3rd edition, Johann Ambrosius Barth Verlag, Heidelberg - Leipzig, 1995.

[11] Dam E.R. van, Graphs with few eigenvalues, Thesis, Tilburg University, Tilburg, 1996.

2002

[12] Chen Y., Properties of spectra of graphs and line graphs, *Appl. Math. J. Chinese Univ. Ser. B* 17(3) (2002), 371-376.

2003

[13] Dam E.R. van, Haemers W., Which graphs are determined by their spectrum?, *Linear Algebra Appl.* 373 (2003), 241-272.

2004

[14] Haemers W., Spence E., Enumeration of cospectral graphs, *Europ. J. Comb.* 25 (2004), 199-211.

[15] Das K.Ch., A characterization of graphs which ahieve the upper bound for the largest Laplacian eigenvalue, *Linear Algebra Appl.*, 376(2004), 173-186.

2005

[16] Cvetković D., Signless Laplacians and line graphs, *Bull. Acad. Serbe Sci. Arts, Cl. Sci. Math. Natur., Sci. Math.* 131(2005), No. 30, 85-92.

[17] Hong Y., Zhang X.-D., Sharp upper and lower bounds for largest eigenvalue of the Laplacian matrices of trees, *Discrete Math.*, 296(2005), 187-197.

2006

[18] Daneshgar A., Hajiabolhassan H., Graph homomorphisms and nodal domains, *Linear Algebra Appl.*, 418(2006), 44-52.

2007

[19] Cvetković D., Rowlinson P., Simić S.K., Signless Laplacians of finite graphs, *Linear Algebra Appl.*, 423(2007), No. 1, 155-171.

[20] Cvetković D., Rowlinson P., Simić S., Eigenvalue bounds for the signless Laplacian, *Publ. Inst. Math. (Beograd)*, 81(95)(2007), 11-27.

[21] Feng L., Li Q., Zhang X.-D., Minimizing the Laplacian spectral radius of trees with given matching number, *Linear Multilinear Algebra*, 55(2007), No. 2, 199-207.

[22] Feng L., Yu G., No starlike trees are Laplacian cospectral, *Univ. Beograd, Publ. Elektrotehn. Fak., Ser. Mat.*, 18(2007), 46-51.

[23] Stanić Z., *Some reconstructions in spectral graph theory and graphs with integral Q-spectrum*, (Serbian), Doctoral Thesis, Faculty of Mathematics, Belgrade, 2007.

[24] Stanić Z., There are exactly 172 connected Q–integral graphs up to 10 vertices, *Novi Sad J. Math.*, 37(2007), No. 2, 193-205.

[25] Stevanović D., Research problems from the Aveiro Workshop on Graph Spectra, *Linear Algebra Appl.*, 423(2007), No. 1, 172-181.

2008

[26] Cardoso D., Cvetković D., Rowlinson P., Simić S., A sharp lower bound for the least eigenvalue of the signless Laplacian of a non-bipartite graph, *Linear Algebra Appl.*, 429(2008), 2770-2780.

[27] Cvetković D., New theorems for signless Laplacians eigenvalues, *Bull. Acad. Serbe Sci. Arts, Cl. Sci. Math. Natur., Sci. Math.*, 137(2008), No. 33, 131-146.

[28] Fan Y.-Z., Tam B.-S., Zhou J., Maximizing spectral radius of unoriented Laplacian matrix over bicyclic graphs, *Linear Multilinear Algebra*, 56(2008), No. 4, 381-397.

[29] Liu J., Liu B., The maximum clique and the signless Laplacian eigenvalues, *Czechoslovak Math. J.*, 58(2008), No. 4, 1233-1240.

[30] Simić S.K., Stanić Z., Q–integral graphs with edge-degrees at most five, *Discrete Math.*, 308(2008), 4625-4634.

[31] Tam B.-S., Fan Y.-Z., Zhou J., Unoriented Laplacian maximizing graphs are degree maximal, *Linear Algebra Appl.*, 429(2008), 735-758.

[32] Yu G.-H., On the maximal signless Laplacian spectral radius of graphs with given matching number, Proc. Japan, Acad., Ser. A, 84(2008), 163-166.

[33] Zhu P., Wilson R.C., A study of graph spectra for comparing graphs and trees, *Pattern Recognition*, 41(2008), No. 9, 2833-2841.

[34] Zhou B., Gutman I., A connection between ordinary and Laplacian spectra of bipartite graphs, *Linear and Multilinear Algebra*, 56(2008), 305-310.

2009

[35] Cai G.X., Fan Y.-Z., The signless Laplacian spectral radius of graphs with given chromatic number, (Chinese), *Mathematica Applicata*, 22(1)(2009),161-167.

[36] Cvetković D., Rowlinson P., Simić S., *An Introduction to the Theory of Graph Spectra*, Cambridge University Press, Cambridge, 2009.

[37] Cvetković D., Simić S.K., Towards a spectral theory of graphs based on the signless Laplacian, I, *Publ. Inst. Math.(Beograd)*, 85(99)(2009), 19-33.

[38] Das K.Ch., A sharp upper bound on the maximal entry in the principal eigenvector of symmetric nonnegative matrix, *Linear Algebra Appl.*, 431(2009), 1340-1350.

[39] Fan Y.-Z., Yang D., The signless Laplacian spectral radius of graphs with given number of pendant vertices, *Graphs and Combinatorics*, 25(2009), 291-298.

[40] Feng L., Yu G., The signless Laplacian spectral radius of unicyclic graphs with graph constraints, *Kyungpook Math.*, 49(2009), 123-131.

[41] Feng L.-H., Yu G.-H., On three conjectures involving the signless Laplacian spectral radius of graphs, *Publ. Inst. Math.(Beograd)*, 85(99)(2009), 35-38.

[42] Gutman I., Kiani D., Mirzakhah M., Zhou B., On incidence energy of a graph, *Linear Algebra Appl.*, 431(2009), 1223-1233.

[43] Haemers W., Regularity and spectra of graphs, *Surveys in Combinatorics 2009*, ed. S. Huchynska, J.D. Mitchel, C.M. Roney-Dougal, Cambridge University Press, Cambridge, 2009, 75-90.

[44] Jooyandeh M.R., Kiani D., Mirzakhah M., Incidence energy of a graph, *MATCH Commun. Math. Comput. Chem.*, 62(2009), 561-572.

[45] Omidi G.R., On a signless Laplacian spectral characterization of T-shape trees, *Linear Algebra Appl.* 431(2009), 1607-1615.

[46] Rojo O., Spectra of copies of a generalized Bethe tree attached to any graph, *Linear Algebra Appl.*, 431(2009), 863-882.

[47] Simić S.K., Stanić Z., On some forests determined by their Laplacian or signless Laplacian spectrum, *Comput. Math. Appl.*, 58(2009), 171-178.

[48] Stanić Z., Some results on Q-integral graphs, *Ars Combin.*, 90(2009), 321-335.

[49] Wang J., Huang Q., Belardo F., Li Marzi E.M., On graphs whose signless Laplacian index does not exceed 4.5, *Linear Algebra Appl.*, 431(2009), 162-178.

[50] Wu R.R., Fan Y.-Z., The signless Laplacian spectral radius of graphs with given number of cut edges, *J. Anhui Univ. Sci. Technology (Nat.Sci.)*, 29(2)(2009), 66-69.

[51] Zhang X.-D., The signless Laplacian spectral radius of graphs with given degree sequences, *Discrete Appl. Math.*, 157(2009), 2928-2937.

[52] Zhang Y., Liu X., Zhang B., Yong X., The lollipop graph is determined by its Q–spectrum, *Discrete Math.*, 309(2009), 3364-3369.

2010

[53] Chang T.-J., Tam B.-S., Graphs with maximal signless Laplacian spectral radius, *Linear Algebra Appl.* 432(2010), 1708-1733.

[54] Liu M., Liu B., The signless Laplacian spread, *Linear Algebra Appl.*, 432(2010), 505-514.

[55] Tam B.-S., Wu S.-H., On the reduced signless Laplacian spectrum of a degree maximal graph, *Linear Algebra Appl.*, 432(2010), 1734-1756.

[56] Zhou B., Signless Laplacian spectral radius and Hamiltonicity, *Linear Algebra Appl.*, 432(2010), 566-570.

In process of publication

[57] Andjelić M., Simić S.K., Some notes on the threshold graphs, to appear.

[58] Aouchiche M., Hansen P., A survey of automated conjectures in spectral graph theory, *Linear Algebra Appl.* (2009), doi:10.1016/j.laa.2009.06.029 , to appear.

[59] Belardo F., Li Marzi E.M., Simić S.K., Wang J., On the index of necklaces, *Graphs Combin.*, to appear.

[60] Chang T.-J., Tam B.-S., Wu S.-H., Theorems on partitioned matrices revisited and their applications to study of graph spectra, to appear.

[61] Cvetković D., Simić S.K., Towards a spectral theory of graphs based on the signless Laplacian, II, *Linear Algebra Appl.*, doi: 10.1016/j.laa.2009.05.020, to appear.

[62] Cvetković D., Simić S.K., Towards a spectral theory of graphs based on the signless Laplacian, III, *Applicable Analysis and Discrete Math.*, to appear.

[63] Cvetković D., Simić S.K., Stanić Z., Spectral determination of graphs whose components are paths and cycles, to appear.

[64] Dam E.R. van, Haemers W., Developments on spectral characterization of graphs, CentER Discussion Paper 2007-33, 2007, 1-17; *Discrete Math.*, doi: 10.1016/jdisc.2008.08.019, to appear.

[65] Das K.Ch., On conjectures involving second largest signless Laplacian eigenvalue of graphs, *Linear Algebra Appl.*, to appear.

[66] Feng L., The signless Laplacian spectral radius for bicyclic graphs with k pendant vertices, *Kyungpook Math. J.*, to appear

[67] Feng L.-H., Yu G.-H., The signless Laplacian spectral radius of graphs with given diameter, *Utilitas Math.*, 83(2010), to appear.

[68] Freitas M.A.A. de, Abreu N.M.M. de, Del-Vecchio R.R., Infinite families of Q–integral graphs, *Linear Algebra Appl.* (2009), doi:10.1016/j.laa.2009.06.029 , to appear.

[69] Geng X., Li S., Simić S.K., On the spectral radius of quasi-k-cyclic graphs, to appear.

[70] Gong S.-C., Fan Y.-Z., Yin Z.-X., The unicyclic graphs with extremal signless Laplacian spectral spread, *Appl. Math. J. Chin. Univ.*, to appear.

[71] Hansen P., Lucas C., Bounds and conjectures for the signless Laplacian index of graphs, to appear.

[72] Hansen P., Lucas C., An inequality for the signless Laplacian index of a graph using the chromatic number, to appear.

[73] Liu M.H., Liu L.B., On the signless Laplacian spectral radii of bicyclic and tricyclic graphs, to appear.

[74] Liu M.H., Tan X.Z., Liu L.B., On the ordering of the signless Laplacian spectral radii of unicyclic graphs, *Appl. Math. J. Chinese Univ., Ser. B*, to appear.

[75] Oliveira C.S., Lima L.S. de, Abreu N.M.M. de, Hansen P., Bounds on the index of the signless Laplacian of a graph, *Discrete Appl. Math.*, (2009), doi:10.1016/j.dam.2009.05.023, to appear.

[76] Oliveira C.S., Lima L.S. de, Abreu N.M.M. de, Kirkland S., Bounds on the Q–spread of a graph, *Linear Algebra Appl.* (2009), doi:10.1016/j.laa.2009.06.011, to appear.

[77] Simić S.K., Stanić Z., On Q-integral $(3, s)$-semiregular bipartite graphs, *Applicable Analysis and Discrete Math.*, to appear.

[78] Wang J.-F., Belardo F., Huang Q., Borovićanin B., On the second largest Q-eigenvalues of graphs, preprint.

[79] Wang J.-F., Huang Q., Belardo F., Signless Laplacian spectral characterizations of 3-rose graphs, to appear.

[80] Wang J.-F., Huang Q., An X.H., Belardo F., Some results on the signless Laplacians of graphs, Applied Mathematics Letters, to appear.

[81] Wang J.-F., Huang Q., Belardo F., Signless Laplacian coefficients and spectral characterization of graphs, to appear.

[82] Wang J.-F., Huang Q., Belardo F., Li Marzi E.M., On the spectral characterizations of ∞-graphs, *Discrete Math.*, to appear.