

Prof IRENE SCIRIHA

DEPARTMENT OF MATHEMATICS

Selected Publications in Refereed Journals and Books:

For a more comprehensive list visit

<http://staff.um.edu.mt/isci1/pub11.pdf>

References

- [1] Alexander Farrugia and Irene Sciriha*. Controllability of undirected graphs. *Linear Algebra and its Applications (Laa)*, **454**, 138–157 (2014).
- [2] Patrick W. Fowler, Barry T. Pickup, Tsanka Todorova, Martha Borg, and Irene Sciriha. Omni-conducting and omni-insulating molecules. *Journal of Chemical Physics (JCP)*, 2014.
- [3] Jane Coates, Josef Lauri, and Irene Sciriha. Polynomial reconstruction for certain subclasses of disconnected graphs. *Graph Theory Notes of New York*, LXIII(5):41–48, 2013.
- [4] Alexander Farrugia and Irene Sciriha*. The main eigenvalues and number of walks in self-complementary graphs. *Linear and Multilinear Algebra*, 2013.
- [5] P.W. Fowler, B. T. Pickup, T.Z. Todorova, R. De Los Reyes, and I. Sciriha. Omni-conducting fullerenes (editor’s choice). *Chemical Physics Letters*, 568/569:33–35, 2013.
- [6] Irene Sciriha, Mark Debono, Martha Borg, Patrick Fowler, and Barry T. Pickup. Interlacing-extremal graphs. *Ars Math. Contemp.*, 6(2):261–278, 2013.
- [7] I. Sciriha. Maximal and extremal singular graphs. *Journal of Mathematical Sciences -Springer (JMS)*, 182-2:117–125, 2012.

- [8] I. Sciriha and C.M. da Fonseca. On the rank spread of graphs. *Linear and Multilinear Algebra (LAMA)*, 60-1:73–92, 2012.
- [9] I .Sciriha and Simic S. K. On eigenspaces of some compound graphs, in recent results in design and graphs, eds. m. buratti et al. *Quaderni di Matematica (QM)*, pages 401–418, 2013.
- [10] Irene Sciriha and Stephanie Farrugia. On the spectrum of threshold graphs. *ISRN Discrete Mathematics International Scholarly Journal*, 108509, 2011.
- [11] I. Sciriha. Maximal and extremal singular graphs. *Sovremennaya Matematika i Ee Prilozheniya-Contemporary Mathematics and its Applications*, 71:1–9, 2011.
- [12] I. Sciriha. Extremal non-bonding orbitals. *MATCH Commun. Math. Comput. Chem.* –(Impact factor 3.5) <http://www.pmf.kg.ac.rs/match/>, 63(3):751–768, 2010.
- [13] Irene Sciriha. Graphs with a common eigenvalue deck. *Linear Algebra Appl.*, 430(1):78–85, 2009.
- [14] Irene Sciriha. Maximal core size in singular graphs – <http://amc.imfm.si>. *Ars Mathematica Contemporanea* , 2(2):217–229, 2009.
- [15] Irene Sciriha. "Lisbon" and Gender Gaps in Employment. *Anti-Discrimination, Inclusion and Equality in Malta, The European documentation and Research Centre and Jean Monnet European Centre of Excellence, Civil Society Project Report, in ed. Peter G. Xuereb, EU, 2005*), 115–120, 2008.
- [16] I. Sciriha. Poster: Growing Larger Fullerenes. 2008.
- [17] Irene Sciriha. Coalesced and embedded nut graphs in singular graphs. *Ars Math. Contemp.*, 1(1):20–31, 2008.
- [18] AIM Minimum Rank Special Graphs Work Group I. Sciriha et al. Zero forcing sets and the minimum rank of graphs. *Linear Algebra and Appl. (LAA)*, 428:1628–1648, 2008.

- [19] Irene Sciriha and Patrick W. Fowler. On nut and core singular fullerenes. *Discrete Math.*, 308(2–3):267–276, 2008.
- [20] Peter Rowlinson and Irene Sciriha. Some properties of the Hoffman-Singleton graph. *Appl. Anal. Discrete Math.*, 1(2):438–445, 2007.
- [21] I. Sciriha and P. W. Fowler. Nonbonding orbitals in fullerenes: Nuts and cores in singular polyhedral graphs. *J. Chem. Inf. Model. (JCIM) (Impact factor 8.09)*, 47:1763–1775, 2007.
- [22] Irene Sciriha. A characterization of singular graphs. *Electron. J. Linear Algebra*, 16:451–462 (electronic), 2007.
- [23] M. C. Marino, I. Sciriha, S. K. Simić, and D. V. Tošić. More about singular line graphs of trees. *Publ. Inst. Math. (Beograd) (N.S.)*, 79(93):1–12, 2006.
- [24] Irene Sciriha. Repeated eigenvalues of the line graph of a tree and of its deck. *Util. Math.*, 71:33–55, 2006.
- [25] I. Sciriha and P. W. Fowler. Zooming in on fullerenes. *Xjenza*, 2:8–10, 2005.
- [26] Irene Sciriha and Patrick W. Fowler. A spectral view of fullerenes. *Math. Balkanica (N.S.)*, 18(1-2):183–192, 2004.
- [27] Enzo Maria Li Marzi and Irene Sciriha. The Boolean power sequence of graphs. *Graph Theory Notes N. Y.*, 46:20–26, 2004.
- [28] I. Sciriha. Recent results in algebraic graph theory. *International Congress MASSEE 2003 Borovets Bulgaria*, 2003.
- [29] Irene Sciriha. The challenges that european research imposes on female scientists in gender equality. *FP6, J.Sikora and C.Wehle eds., EUbro, Federal Ministry of Education and Research (BMBF) Germany*, 33-37, 2003.
- [30] Irene Sciriha. The cradle of thought for effective policy- making. *UoM Annual Report*, 33-37, 2003.

- [31] Irene Sciriha and M. Juanita Formosa. On polynomial reconstruction of disconnected graphs. *Util. Math.*, 64:33–44, 2003.
- [32] I. Sciriha. If a disconnected graph were a counter example to the prp. *13th Combinatorial Conference, Colchester, Essex University*, 2002.
- [33] Irene Sciriha. Polynomial reconstruction and terminal vertices. *Linear Algebra Appl.*, 356:145–156, 2002. Special issue on algebraic graph theory (Edinburgh, 2001).
- [34] Irene Sciriha. Polynomial reconstruction: old and new techniques. *Rend. Sem. Mat. Messina Ser. II*, 8(24)(suppl.):163–179, 2002. 6th Workshop on Combinatorics (Messina, 2002).
- [35] Sciriha. Coronas are polynomial reconstructible. In *Proceedings of the Tenth General Meeting of European Women in Mathematics, Lon, 2001*, volume 148, page 300. World Scientific, Imperial College Press (UK), 2001.
On the nullity of line graphs of trees. *Discrete Mathematics*, 232:35–45, 2001.
- [36] Irene Sciriha and M. Corinna Marino. On the adjacency matrix and the colouring of graphs. *Congr. Numer.*, 148:43–63, 2001.
- [37] I. Sciriha. An algorithm to analyse the polynomial deck of the line graph of a triangle-free graph. *Journal of Combinatorial Mathematics and Combinatorial Computing*, 35:97–105, 2000.
- [38] Irene Sciriha. The two classes of singular line graphs of trees. *Rend. Sem. Mat. Messina Ser. II*, 5(5 Supplemento):167–180, 2000. 5th Workshop on Combinatorics (Messina, 2000).
- [39] I. Sciriha. On the Rank of Graphs. *Graph Theory and Algorithms II in ed. Y.Alavi, D.R.Lick and A.Schwenk, Michigan*, 769–778, 1999.
- [40] Irene Sciriha. The characteristic polynomials of windmills with an application to the line graphs of trees. *Graph Theory Notes of New York*.

- [41] Irene Sciriha. *On Some Aspects of Graph Spectra*. Ph.D.Thesis Univ Mathematics, Lon, 1998) British Library, University of Reading UK., pp300, World Scientific, Imperial College Press (UK).
- [42] Irene Sciriha. On singular line graphs of trees. *Congr. Numer.*, 135:73–91, 1998.
- [43] Irene Sciriha. On the construction of graphs of nullity one. *Discrete Math.*, 181(1-3):193–211, 1998.
- [44] I. Sciriha and S. Fiorini. On the characteristic polynomial of homeomorphic images of a graph. *Discrete Math.*, 174(1-3):293–308, 1997. Combinatorics (Rome and Montesilvano, 1994).
- [45] Irene Sciriha. On the coefficient of λ in the characteristic polynomial of singular graphs. *Util. Math.*, 52:97–111, 1997.
- [46] I. Sciriha. Graphs and their spectra. *Xjenza*, 1.1:21–23, 1996.
- [47] Irene Sciriha, Stanley Fiorini, and Joseph Lauri. Minimal basis for a vector space with an application to singular graphs. *Graph Theory Notes N. Y.*, 31:21–24, 1996. New York Graph Theory Day, 31 (1996).