

# Publications

by Dong Fengming

## Books:

1. K.M. Koh, F.M. Dong and E.G. Tay, *Solution Manual to Introduction to Graph Theory (H3 Mathematics)*, World Scientific, Singapore, to appear.
2. K.M. Koh, F.M. Dong and E.G. Tay, *Introduction to Graph Theory (H3 Mathematics)*, World Scientific, Singapore, 2007.
3. F.M. Dong, K.M. Koh and K.L. Teo, *Chromatic polynomials and chromaticity of graphs*, World Scientific, Singapore, 2005.

## Papers:

1. K.M. Koh, Goh.C.Y. and F.M. Dong, The Maximum Number of Maximal Independent Sets in Unicyclic Connected Graphs, *Discrete Math*, to appear.
2. F.M. Dong and K.M. Koh, On planar and nonplanar graphs having no chromatic zeros in the interval  $(1, 2)$ , *Discrete Math*, to appear.
3. F.M. Dong and K.M. Koh, A maximal zero-free interval of chromatic polynomials of bipartite planar graphs, *Discrete Math*, to appear.
4. F.M. Dong and K.M. Koh, Domination Numbers and Zeros of Chromatic Polynomials, *Discrete Math*, to appear.
5. F.M. Dong and K.M. Koh, Bounds for the coefficients of flow polynomials, *J. Combin. Theory Ser. B* **97** (2007), 413-420.
6. F.M. Dong and K.M. Koh, On graphs having no chromatic zeros in the interval  $(1, 2)$ , *SIAM J. On Discrete Mathematics*, Vol. 20, No. 3 (2006), 799-810.
7. F.M. Dong, Further results on the lower bounds of Mean Colour numbers, *J. Graph Theory* **48** (2005), 51-73.

8. F.M. Dong and K.M. Koh, On upper bounds of real roots of chromatic polynomials, *Discrete Math.* **282** (2004), 95-101.
9. F.M. Dong, The largest non-integer real zero of chromatic polynomials of graphs with fixed order, *Discrete Math.* **282** (2004), 103-112.
10. F.M. Dong, K.M. Koh and C.A. Soh, Divisibility of Certain Coefficients of the Chromatic Polynomials, *Discrete Math.* **275** (2004), 311-317.
11. F.M. Dong, K.L. Teo, C.H.C. Little, M.D. Hendy and K.M. Koh, Chromatically unique Multi-bridge Graphs, *Electronic Journal of Combinatorics* **11** (2004), #R12.
12. F.M. Dong, M.D. Hendy, K.L. Teo and C.H.C. Little, Graph-functions associated with an edge property, *Australia J. of Combinatorics* **30** (2004), 3-20.
13. F.M. Dong and K.M. Koh, Two results on real roots of chromatic polynomials, *Combin. Probab. Comput.* **13** (2004), 809-813.
14. Tay Eng Guan, Toh Tin Lam, Dong Fengming and Lee Tuo Yeong, The convergence of a linearly recursive sequence, *the International Journal of Mathematical Education in Science and Technology (Classroom Notes)* **35** (2004), no.1, 51-63.
15. F.D. Dong, Bounds on mean colour numbers of graphs, *J. Combin. Theory Ser. B* **87** (2003), 348-365.
16. F.M. Dong, K.L. Teo, C.H.C. Little and M. Hendy, Chromaticity of some families of dense graphs, *Discrete Math.* **258** (2002), 303-321.
17. F.M. Dong, M. Hendy, K.L. Teo and C.H.C. Little, The vertex-cover polynomial of a graph, *Discrete Math.* **250** (2002), 71-78.
18. F.M. Dong, K.L. Teo, K.M. Koh and M. Hendy, Non-chordal graphs having integral-root chromatic polynomials (II), *Discrete Math.* **245** (2002), 247-253.

19. F.M. Dong, K.L. Teo and K.M. Koh, A Note on the Chromaticity of Some 2-connected  $(n, n + 3)$ -Graph, *Discrete Math.* **243** (2002), 217-221.
20. F. M. Dong, K.L. Teo, C.H. C. Little and M.D. Hendy, Two invariants for adjointly equivalent graphs. *Australia J. of Combinatorics* **25** (2002), 133-143.
21. F.M. Dong, K.L. Teo, C.H.C. Little and M.D. Hendy, Zeros of some adjoint polynomials of paths and cycles, *Australia J. of Combinatorics* **25** (2002), 167-174.
22. F.M. Dong, K.M. Koh, K.L. Teo, C.H.C.Little and M. Hendy, Sharp bounds for the number of 3-partitions and the chromatic uniqueness of bipartite graphs, *J. Graph Theory* **37** (2001), 48-77.
23. F.M. Dong, K.L. Teo, C.H.C.Little and M. Hendy, Some inequalities on chromatic polynomials, *New Zealand Journal of Math.*, **30** (2001), 111-118.
24. F.M. Dong, K.M. Koh and K.L. Teo, Structures and chromaticity of extremal 3-colourable sparse graphs, *J. Graphs and Combinatorics* **17** (2001), no. 4, 611-635.
25. F.M. Dong, Proof of a chromatic polynomial conjecture, *J. Combin. Theory Ser. B* **78** (2000), 35-44.
26. F.M. Dong, K.M. Koh, K.L. Teo, C.H.C.Little and M. Hendy, Chromatically unique bipartite graphs with low 3-independent partition numbers, *Discrete Math.* **224** (2000), 107-124.
27. F.M. Dong, K.M. Koh, K.L. Teo, C.H.C.Little and M. Hendy, An attempt to classify bipartite graphs by chromatic polynomials, *Discrete Math.* **222** (2000), 73-88.
28. F.M. Dong and K.M. Koh, Structures and chromaticity of some extremal 3-colourable graphs, *Discrete Math.* **203** (1999), 71-82.
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30. F.M. Dong and Y.P. Liu, All wheels with two missing consecutive spokes are chromatically unique, *Discrete Math.* **184** (1998), 71-85.
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32. F.M. Dong and K.M. Koh, On graphs in which any two colour classes induce a tree, *Discrete Math.* **176** (1997), 97-113.
33. F.M. Dong and K.M. Koh, On graphs in which any pair of colour classes but one induces a tree, *Discrete Math.* **169** (1997), 39-54.
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35. F.M. Dong and Y.P. Liu, On the chromatic uniqueness of the graph  $W(n, n-2; k)$ , *J. Graphs and Combinatorics* **12** (1996), 221-230.
36. F.M. Dong and K.M. Koh, The sizes of graphs with small girth, *Bulletin of Combinatorics and Applications* **12** (1996), 33-44.
37. Y.F. Xu and F.M. Dong, On graphs with zero determinant of adjacency matrices, (in Chinese), *Math. Appl.* **9** (1996), no. 2, 254-255.
38. F.M. Dong and Y.P. Liu, On the chromatic uniqueness of the graph  $W(n, n-2) + K_k$ , *Discrete Math.* **145** (1995), 95-103.
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41. F.M. Dong, The chromatic uniqueness of two classes of special graphs, (in Chinese), *Acta Mathematica Sinica* **34** (1991), 242-251.
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**Following papers are more related to Mathematics Education**

45. Tay Eng Guan, Quek Khiok Seng, Dong Fengming, Toh Tin Lam, Ho Foo Him, Mathematical Problem Solving for Integrated Programme Students: The Practical Paradigm, *Proceedings EARCOME 4 2007: Meeting the Challenges of Developing a Quality Mathematics Education Culture* (2007) 463-470.
46. Quek Khiok Seng, Tay Eng Guan, Choy Ban Heng, Dong Fengming, Toh Tin Lam, Ho Foo Him, Mathematical Problem Solving for Integrated Programme Students: Beliefs and performance in non-routine problems, *Proceedings EARCOME 4 2007: Meeting the Challenges of Developing a Quality Mathematics Education Culture* (2007) 492-497.
47. K.M. Koh, F.M. Dong and E.G. Tay, Graphs and their applications (9), *Math. Medley* **33** (2007), no. 2, 7-14.
48. K.M. Koh, F.M. Dong and E.G. Tay, Graphs and their applications (8), *Math. Medley* **33** (2006), no. 1, 7-17.
49. K.M. Koh, F.M. Dong and E.G. Tay, Graphs and their applications (7), *Math. Medley* **32** (2005), no. 2, 10-18.
50. K.M. Koh, F.M. Dong and E.G. Tay, Graphs and their applications (6), *Math. Medley* **32** (2005), no. 1, 2-10.
51. K.M. Koh, F.M. Dong and E.G. Tay, Graphs and their applications (5), *Math. Medley* **31** (2004), no. 2, 77-87.

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56. Dong Fengming, Lee Tuo Yeong, Tay Eng Guan, Toh Tin Lam, Performance of Singapore Junior College Students on some Nonroutine Problems, in *Mathematics Education for a Knowledge-based Era* –Proceedings of Second East Asia Regional Conference on Mathematics Education and Ninth Southeast Asian Conference on Mathematics Education, Singapore (2002), 71-77.