# List of publications 1970-1999 Bjarne Toft

[1]        B. Toft, *Some contributions to the theory of colour-critical graphs,* Ph.D.-thesis University of London, published as no.14, Various Publication Series, Aarhus Universitet (1970), 156 pages.

[2]        B. Toft, On the maximal number of edges of critical k-chromatic graphs, *Studia Sci. Math. Hungar.* **5** (1970), 461-470.

[3]        B. Toft, Two theorems on critical 4-chromatic graphs, *Studia Sci. Math. Hungar.* **7** (1972), 83-89.

[4]        B. Toft, On separating sets of edges in contraction-critical graphs, *Math.Ann.* **196** (1972), 129-147.

[5]        B. Toft, On critical subgraphs of colour-critical graphs, *Discrete   Math.* **7** (1974), 377-392.

[6]        B. Toft, Color-critical graphs and hypergraphs, *J. Combinatorial Theory  B* **16** (1974),   145-161.

[7]        B. Toft, On colour-critical hypergraphs, in: *Coll. Math.* Soc. *Janos Bolyai, Infinite andfinite* sets, North-Holland Publ. Comp. (1973),  1445-1457.

[8]        G.A. Dirac, B. Aagaard Sørensen and B. Toft, An extremal result for graphs with an application to their colourings, *J. Reine Angew. Math.* **268/269** (1974), 216-221.

[9]        F. Escalante and B. Toft, On clique-critical graphs, *J. Combinatorial  Theory B* **17** (1974),  170-182.

[10a]      F. Nielsen and B. Toft, *On a class of planar  4-chromatic graphs due to T. Gallai, and  its  critical  members,* Matematisk Institut, Danmarks Tekniske Højskole  (1974), 32 pages.

[10b]      F. Nielsen and  B.Toft, On a  class of planar 4-chromatic graphs due to T.Gallai, in: *Recent Advances in Graph Theory, Proceedings   of the Symposium held in Prague, June 1974,* Akademia Praha (1975),  425-430.

[11]        B. Toft, Jobtildeling og travelling salesman som matroideproblemer, in: *Matroideteori,* Matematisk Institut, Danmarks Tekniske Højskole (1976), 39-48.

[12a]      B. Toft, *Colour-critical graphs with complements of low connectivity,* rapport, Odense Universitet (1977), 50 pages.

[12b]      B. Toft, An investigation of colour-critical graphs with complements of low connectivity, *Annals of Discrete Math.* **3** (1978), 279-287.

[13]        B. Toft, Graph colouring: a survey of some problems and results, *Proceedings of the DAPS-seminar, DIKU* (1980), 351-363.

[14]        H.L. Abbott, A. Liu and B. Toft, The enumeration problem for color critical linear hypergraphs, *J. Combinatorial Theory B* **29** (1980), 106-115.

[15]        U. Krusenstjerna-Hafstrøm and B. Toft, Special subdivisions of $K_4$ and 4-chromatic graphs, *Monatshefte Math.* **89** (1980), 101-110.

[16]        U. Krusenstjerna-Hafstrøm and B. Toft, Some remarks on Hadwiger's conjecture and its relation to a conjecture of Lovász, in: *Proceedings of the $4^{th}$ International Graph Theory Conference (Kalamazoo 1980),* John Wiley 1981, 449-459.

[17]        C.Thomassen and B. Toft, Non-separating induced cycles in graphs, *J. Combinatorial Theory B* **31** (1981), 199-224.

[18]        B. Toft, Postbudes principielle problemer, *Ingeniøren* **29** (1983), 10-11.

[19]        K.E. Strange and B. Toft, An introduction to the subgraph homomorphism problem, in: *Graphs and other combinatorial topics , Proceedings of the third Czechoslovak Symposium on Graph Theory, Prague 1982,* (edited by M. Fiedler), B.G. Teubner (1983), 296-301.

[20a]      B. Toft, *Noter til Matematik I, Hæfte I,* Den Naturfaglige Basisuddannelse, Odense Universitet 1983.

[20b]      B. Toft, *Noter til Matematik I, Hæfte II,* Den Naturfaglige Basisuddannelse, Odense Universitet 1983.

[21]     D. Hanson and B. Toft, On the maximum number of vertices in n-uniform cliques, *Ars  Combinatoria*  **16A** (1983),  205- 216.

[22]     B. Toft, Some problems and results related to subgraphs of colour-critical graphs, in: *Graphen in Forschung und Unterricht. Festschrift K. Wagner* (edited by R. Bodendiek, H. Schumacher and G. Walther), Franzbecker Verlag 1985, 178-186.

[23]     B. Toft, *Algoritmisk Kombinatorik - et datalogisk orienteret emne i matematik,* Matematiklærerforeningen 1985, 120 sider.

[24]     L. Døvling Andersen, I. Tafteberg Jakobsen, C. Thomassen, B. Toft and P.D. Vestergaard (editors), *Graph Theory  in Memory of G.A. Dirac, Annals of Discrete Mathematics* **41,** 517 pages.

[25]     D. Hanson and B. Toft, Edge-coloured saturated graphs, *J. Graph Theory* **11** (1987),  191-196.

[26]     D. Hanson, G.C. Robinson and B. Toft, Remarks on the graph colour theorem of Hajós, *Congr. Numerantium* **55** (1986), 69-76.

[27]     B. Toft, *Graph Colouring Theory,* Preprint nr. 2 (1986), Matematisk Institut Odense Universitet, 85 pages. This paper, written at Vanderbilt University, USA, was later developed into a chapter of *The Handbook of Combinatorics* [42].

[28]     B.Toft, *Graph Colouring Problems, Part 1,* Preprint nr. 2 (1987), Institut for Matematik og Datalogi, Odense Universitet, 130 pages. This preprint was later developed into the book [41].

[29]     M.D. Plummer and B. Toft, Cyclic colouration of  3-polytopes, *J. Graph Theory* **11** (1987), 507-515.

[30]     N. Dean, R. L. Hemminger and B. Toft, On contractible edges in 3-connected graphs, *Congr. Numerantium* **58** (1987), 291-293.

[31]      B. Toft, A list of 25 graph colouring problems, in: *Graphentheorie und ihre Anwendungen, Dresdner Reihe zur Forschung* **9** (1988), 61-64.

[32]      B. Toft, 75 unsolved graph colouring problems, in: *Pitman Research* Notes *in Mathematics* **218,** *Graph Colourings* (edited by Roy Nelson and Robin J. Wilson), Longman 1990, 9-35.

[33a]     B. Toft, Cycles modulo 3 in graphs, in: *International Conference Discrete Mathematics, March 1990, Eisenach,* Technische Hochschule Ilmenau 1990, 99-100.

[33b]     N. Dean, A. Kaneko, K. Ota, B. Toft, Cycles modulo 3, DIMACS Technical Report 91-32, May 1991, 17 pages.

[34]      D.Hanson and B.Toft, k-saturated graphs of chromatic number at least k, *Ars Combinatoria* **31** (1991), 159-164.

[35a]     B. Toft, Danmarks verdensberømte Julius Petersen (1839-1910), *Soraner-bladet* **75** (1990), 62-68.

[35b]     B. Toft, Julius Petersen - matematikeren og mennesket, *Odense Universitet Årsberetning 1991* , 58-76.

[35c]     J. Lützen, G. Sabidussi and B.Toft, Julius Petersen 1839-1910. A biopgraphy, *Discrete Math.* **100** (1992), 9-82.

[36]      M. Christiansen, J. Lützen, G. Sabidussi and B. Toft, Julius Petersen annotated bibliography, *Discrete Math.* **100** (1992), 83-97. A revised version has been produced. It contains new items that has come to our attention, corrections of errors, and an attempt to establish chronological order within each individual year. The revised version is mainly due to the fine work of Gert Sabidussi.

[37]      J. Bang-Jensen and B. Toft, Unsolved problems presented at the Julius Petersen Graph Theory Conference, *Discrete Math.* **101** (1992), 351-360.

[38]      L. Døvling Andersen, J. Bang-Jensen, T. R. Jensen, L. Kjær Jørgensen, G. Sabidussi, C. Thomassen, B. Toft and P.D. Vestergaard (editors), *Special Volumes (Part 1 and 2) to mark the Centennial oj Julius Petersen's "Die Theorie der regulären graphs", Discrete Math.* **100** and **101** ( 1992), 330 and 364 pages. Also published under the title *The Julius Petersen Graph Theory Centennial* in the book series *Topics in Discrete Mathematics(1*992), 696 pages.

[39]    B. Toft: Julius Petersen's "Om at tegne en ret linie", in : *Matematiske Ideer* (edited by S. Toft Jensen and J. Matthiasen), Matematiklærerforeningen 1993, 220-237.

[40]    D. Hanson and B. Toft : The (m,n)-conjecture is false, *Bull. Inst. Comb. Appl.* **11** (1994), 59-96.

[41]    T.R. Jensen and B. Toft: *Graph Coloring Problems,* Wiley Interscience Series in Discrete Mathematics and Optimization, 1995, 295 pages.

[42]    B. Toft: Colouring, stable sets and perfect graphs, Chapter 4 of *Handbook of Combinatorics* (ed. R.L. Graham, M. Grotschel, L. Lovász), Vol. I, North-Holland (1995), 233-288

[43]    M. Stiebitz and B. Toft : An abstract generalization of a map reduction theorem of Birkhoff, *J. Combinatorial Theory B* **65** (1995), 165-185.

[44]    T. R. Jensen and B. Toft : Choosability versus chromaticity, *Geombinatorics* **5** (1995), 45-64.

[45]    D. Hanson, G. MacGillivray and B. Toft: Choosability of bipartite graphs, *Ars Combinatorica* 44 (1996), 183-192.

[46]    B.Toft: Problem 85: Parent consultations - a colouring problem, *Math.* Semesterber. **43** (1996), 191-192.

[47]    B.Toft : A survey of Hadwiger's Conjecture, *Congressus Nu.m.* **115** (1996), 249-283.

[48]    B.Toft : Mødet mellem forskere og studerende, *Imod en Ny Videnskabelig Dannelse* (red. J. Gleerp, A.M. Mai, B. Ørsted), Odense Universitetsforlag 1997, 91-103.

[49]    D. Hanson, C.O.M. Loten and B. Toft : On interval colourings of bi-regular bipartite graphs, *Ars Combinatoria* **50** (1998), 23-32.