

Curriculum Vitae

F. Havet

Projet Mascotte, CNRS/INRIA/UNSA,
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Date of birth: 20/09/1973 Place of birth: Orléans, France.

Married, two children.

1 Diplomas

“Habilitation à diriger des recherches” in Computer Science, *defended December 12th 2007, University of Nice.*

PhD in Mathematics, *defended January 12th 1999, University of Lyon 1.*

2 Cursus

10/06 –	CR1, CNRS, Projet Mascotte, I3S, Sophia-Antipolis
10/01 – 09/06	CR2, CNRS, Projet Mascotte, I3S, Sophia-Antipolis
01/01 – 09/01	Post-doc, Projet Mascotte, I3S, Sophia-Antipolis
03/99 – 12/00	Post-doc, Oxford University and British Telecom
09/96 – 02/99	PhD Student, University of Lyon 1

3 PhD Students

- L. Sampaio “Aspects algorithmiques de la coloration de graphes”, since october 2010.
- N. Cohen “Allocations de fréquences et coloration des L -graphes”, since october 2008.
- M. Asté “Allocations de fréquences et coloration de graphes avec contraintes”, October 2007-March 2009.
- O.Amini “Algorithmes de décomposition de graphes et applications aux réseaux de télécommunications” defended in november 2007. Presently CR2 CNRS at Ecole Normale Supérieure, Paris.
- J.-S. Sereni “Allocation de fréquences par la coloration de graphe” defended in July 2006. Presently CR2 CNRS at LIAFA, Paris.

4 Organisation of scientific meetings

- Member of the programme committee of JGA'10 (12emes Journées Graphes et Algorithmes) in Marseille in November 2009.
- Member of the programme committee of WG'10, Zaros, Grèce, June 2010.
(<http://wg2010.indev.gr/>).
- Président du comité d'organisation et du comité de programme de l'école AGAPE'09, (Spring School on Fixed Parameter and Exact Algorithms), à Lozari en May 2009.
(<http://www-sop.inria.fr/mascotte/seminaires/AGAPE/>).
- Member of the programme committee of JGA'09 (11emes Journées Graphes et Algorithmes) in Montpellier in November 2009.
- Organisateur des trois “Czech-Sloveno-French Workshop on Graph Colouring”, à Puylobier en Novembre 2008, Novembre 2009 et Septembre 2010.
- Chair of the organizing and programme committee of JGA'08 (10emes Journées Graphes et Algorithmes) in Sophia-Antipolis in November 2008.
- Organiser of the days GALET in Sophia-Antipolis in July 2006.
- Member of the programme committee of JCB60, Sophia-Antipolis, December 2005.
- Member of the programme committee of WG'06, Bergen (Norway), June 2006.
- Chair of the organizing committee d'ICGT'05 (7th International Colloquium on Graph Theory) in Hyères in September 2005.
- Co-chair of the programme committee '04 ((Sixièmes Rencontres Francophones sur les aspects Algorithmiques des Télécommunications), 2004, Batz-sur-mer, France.
- Co-chair of the steering committee of JCALM (Journées Combinatoire et Algorithmes du Littoral Méditerranéen). Organiser of the first JCALM in Sophia-Antipolis in October 2006, the fourth in June 2008 and the seventh in Octobre 2009.
(<http://www-sop.inria.fr/mascotte/seminaires/JCALM/>).
- Organizer of the seminar of projet Mascotte since 2002.
(<http://www-sop.inria.fr/mascotte//seminaires/projet>).

5 Invited Talks

- *Finite and Infinite Combinatorics*, Budapest, Hungary, January 2001.
- *RAND '03*, Oxford, Grande-Bretagne, December 2002.
- *Workshop on Fundamental Aspects in Networks Problems*, Fortaleza, Brasil, May 2005.
- *Graph Theory 2005*, Nyborg, Danemark, December 2005.
- *JCB60*, conference in the honour of Jean-Claude Bermond sixtieth birthday, Sophia-Antipolis, December 2005.
- *International Conference on Discrete Mathematics*, Bangalore, India, December 2006.
- *Graph Theory Conference*, Fredericia, Denmark, December 2007.
- *AMS Workshop on Structural Graph Theory*, Baton-Rouge, USA, March 2008.
- *14th SIAM Meeting on Discrete Mathematics*, Burlington, Vermont, USA, June 2008.
- *Cycles and Colourings in Graphs*, High Tatras, Slovaquie, September 2008.
- *Centenary of Celina + Frédéric*, Grenoble, September 2010.
- *International Conference on Graph Theory, Combinatorics and Applications (ICGTCA)*, Zhejiang Normal University, Jinhua, Chine, Octobre-Novembre 2010.

6 Publications

International journals

- [1] L. Addario-Berry, M. Chudnovsky, F. Havet, B. Reed, and P. Seymour. Bisimplicial vertices in even-hole-free graphs. *Journal of Combinatorial Theory Ser. B*, 98(6):1119–1164, 2008.
- [2] L. Addario-Berry, F. Havet, and S. Thomassé. Paths with two blocks in n -chromatic digraphs. *Journal of Combinatorial Theory Ser. B*, 97:620–626, 2007.
- [3] O. Amini, F. Havet, F. Huc, and S. Thomassé. Directed star arboricity with applications to WDM. *Combinatorics, Probability and Computing*, 19:161–182, 2010.
- [4] J. Araujo and N. Cohen and F. Giroire and F. Havet. Good edge-labelling of graphs. In *Discrete Applied Mathematics*, to appear.
- [5] M. Asté, F. Havet and C. Linhares-Sales. Grundy number and products of graphs. *Discrete Mathematics* 310(9):1482–1490, 2010.
- [6] J.-C. Bermond, F. Havet, and D. Tóth. Fault tolerant on board networks with priorities. *Networks*, 47(1):9–25, 2006.
- [7] J.-C. Bermond, F. Havet, F. Huc, and C. Linhares-Sales. Improper colouring of weighted grid and hexagonal graphs. *Discrete Mathematics, Algorithms and Applications*, 2(3):395–411, 2010.
- [8] S. Bessy, E. Birmelé, and F. Havet. Arc-chromatic number of digraphs in which every vertex has bounded outdegree or bounded indegree. *Journal of Graph Theory*, 53(4):315–332, 2006.
- [9] V. Campos, A. Gyárfás, F. Havet, F. Maffray and C. Linhares Sales. New bounds on the Grundy number of products of graphs. *Journal of Graph Theory*, to appear. (INRIA research report RR-7243, 2010).
- [10] S. Céroi and F. Havet. Trees with three leaves are $(n + 1)$ -unavoidable. *Discrete Applied Mathematics*, 141:19–39, 2004.
- [11] N. Cohen and F. Havet. Planar graphs of maximum degree $\Delta \geq 9$ are $(\Delta + 1)$ -choosable. A short proof. *Discrete Mathematics*, 310(21):3049–3051, 2010.
- [12] N. Cohen and F. Havet. Linear and 2-frugal choosability of graphs of small maximum average degree. *Graphs and Combinatorics*, to appear.
- [13] R. Correa, F. Havet and J.-S. Sereni, About a Brooks-type theorem for improper colouring. *Australasian Journal of Combinatorics*, 43:219–230, 2009.
- [14] N. Eggemann, F. Havet and S. Noble. k -L(2, 1)-labelling for planar graphs is NP-complete for $k \geq 4$. *Discrete Applied Mathematics*, 158(16):1777–1788, 2010.
- [15] R. Erman, F. Havet, B. Lidicky and O. Pangrac. 5-colouring graphs with 4 crossings. *SIAM Journal on Discrete Math.*, to appear. (INRIA research report RR-7110, 2009).

- [16] D. Gonçalves, F. Havet, A. Pinlou and S. Thomassé. On spanning galaxies in digraphs. *Discrete Applied Mathematics*, to appear.
- [17] F. Havet. Finding oriented hamiltonian paths in tournaments. *Journal of Algorithms*, 36:253–275, 2000.
- [18] F. Havet. Hamiltonian cycles in tournaments. *Journal of Combinatorial Theory Ser. B*, 80(1):1–31, 2000.
- [19] F. Havet. Channel assignment and multicolouring of the induced subgraphs of the triangular lattice. *Discrete Mathematics*, 233:219–231, 2001.
- [20] F. Havet. Trees in tournament. *Discrete Mathematics*, 243(1–3):121–134, 2002.
- [21] F. Havet. On unavoidability of trees with k leaves. *Graphs and Combinatorics*, 19:101–110, 2003.
- [22] F. Havet. Pancyclic arcs and connectivity in tournaments. *Journal of Graph Theory*, 47(2):87–110, 2004.
- [23] F. Havet. Stable set meeting every longest path. *Discrete Mathematics*, 289(1–3):169–173, 2004.
- [24] F. Havet. Repartitors, selectors and superselectors. *Journal of Interconnexion Networks*, 7(3):391–415, 2006.
- [25] F. Havet. Choosability of the square of planar subcubic graphs with large girth. *Discrete Math.*, 309:3553–3563, 2009.
- [26] F. Havet, S. Jendrol’ , R. Soták and E. Škrabul’áková. Facial non-repetitive edge-colouring of plane graphs. *Journal of Graph Theory*, to appear. (INRIA research report RR-6873, 2009.)
- [27] F. Havet, R. Kang, T. Müller, and J.-S. Sereni. Circular choosability. *Journal of Graph Theory*, 61(4):241–334, 2009.
- [28] F. Havet, R. Kang, and J.-S. Sereni. Improper colouring of unit disk graphs. *Networks*, 54(3): 151–164.
- [29] F. Havet, M. Klazar, J. Kratochvil, D. Kratsch and M. Liedloff. Exact algorithms for $L(2, 1)$ -labellings of graphs. *Algorithmica*, to appear, (INRIA research report RR-6587, 2008.)
- [30] F. Havet, D. Král’, J.-S. Sereni, and R. Škrekovski. Facial colorings using Hall’s Theorem *European Journal of Combinatorics*, 31:1001–1019, 2010.
- [31] F. Havet, C. Linhares Sales and L. Sampaio. b -coloring of tight graphs. *Discrete Applied Mathematics*, to appear. (INRIA Research Report RR-7241, 2010)
- [32] F. Havet, B. Reed, and J.-S. Sereni. $L(p, 1)$ -labelling of graphs. *SIAM Journal on Discrete Math.*, to appear.

- [33] F. Havet and J.-S. Sereni. Improper choosability of graphs and maximum average degree. *Journal of Graph Theory*, 52(3):181–199, 2006.
- [34] F. Havet, J.-S. Sereni, and R. Škrekovski. 3-facial colouring of plane graphs. *SIAM Journal on Discrete Math.*, 22(1): 231–247, 2008.
- [35] F. Havet and S. Thomassé. Median orders: a tool for the second neighborhood problem and sumner’s conjecture. *Journal of Graph Theory*, 35(4):244–256, 2000.
- [36] F. Havet and S. Thomassé. Oriented hamiltonian paths in tournaments: a proof of rosenfeld’s conjecture. *Journal of Combinatorial Theory Ser. B*, 78(2):243–273, 2000.
- [37] F. Havet and S. Thomassé. Complexity of $(p, 1)$ -total labelling. *Discrete Applied Mathematics*, 157:2859–2870, 2009.
- [38] F. Havet, S. Thomassé, and A. Yeo. Hoang-reed conjecture for tournaments. *Discrete Mathematics*, 308: 3412–3415, 2008.
- [39] F. Havet and M. Wennink. The push tree problem. *Networks*, 44(4):281–291, 2004.
- [40] F. Havet and M.-L. Yu. $(p, 1)$ -total labelling of graphs. *Discrete Mathematics*, 308:496–513, 2008.
- [41] F. Havet and J. Zerovnik. Finding a five bicolouring of a triangle-free subgraph of the triangular lattice. *Discrete Mathematics*, 244:103–108, 2002.

International conferences

- [42] J. Araujo and N. Cohen and F. Giroire and F. Havet. Good edge-labelling of graphs. In *V Latin-American Algorithms, Graphs and Optimization Symposium (LAGOS 2009)*, *Electronic Notes on Discrete Mathematics*, 2009.
- [43] M. Asté, F. Havet and C. Linhares-Sales. Grundy number and lexicographic product of graphs. In *Proceedings of ROGICS’08 (May 2008)*, Mahdia, Tunisia, 2008.
- [44] J. Bang-Jensen, F. Havet, and N. Trotignon. Finding an induced subdivision of a digraph. In *Proceedings of LAGOS’11 (March 2011)*, Bariloche, Argentina, 2011.
- [45] S. Céroi and F. Havet. Trees with three leaves are $(n + 1)$ -unavoidable. In Jayme Szwarcfiter and Siang Song, editors, *Electronic Notes in Discrete Mathematics*, volume 7. Elsevier Science Publishers, 2001.
- [46] N. Cohen, F. Havet and T. Müller, Acyclic edge-colouring of planar graphs. In *Eurocomb 2009, Electronic Notes in Discrete Mathematics*, volume 34, pp. 417–421, Elsevier Science Publishers, September 2009.
- [47] D. Gonçalves, F. Havet, A. Pinlou and S. Thomassé. Spanning galaxies in digraphs. In *Eurocomb 2009, Electronic Notes in Discrete Mathematics*, volume 34, pp. 139–143, Elsevier Science Publishers, September 2009.

- [48] F. Havet. Trees in tournaments. In I. Rusu, editor, *Electronic Notes in Discrete Mathematics*, volume 5. Elsevier Science Publishers, 2000.
- [49] F. Havet. Design of fault tolerant satellite networks with priorities via selectors. In *SIROCCO 2002*), pages 165–180, Andros , Greece, June 2002.
- [50] F. Havet, J. van den Heuvel, C. McDiarmid, and B. Reed. List colouring squares of planar graphs. In *Eurocomb 2007*, Sevilla, Spain, September 2007.
- [51] F. Havet, R. Kang and J.-S. Sereni. Improper colouring of unit disk graphs. In *Proceedings of ICGT'05 (Sept. 2005)*, *Electronic Notes in Discrete Math.*, volume 22, 2005.
- [52] F. Havet and C. Linhares-Sales. Combinatória e Problemas em Redes de Telecomunicações. In *Colibiri 2009*, Rio Grande do Sul, Brasil, July 2009.
- [53] F. Havet, B. Reed, and J.-S. Sereni. $L(2, 1)$ -labelling of graphs. In *SODA '08: Proceedings of the nineteenth annual ACM-SIAM symposium on Discrete algorithms (January 2008)*, San Francisco, California, pages 621–630, 2008.
- [54] F. Havet and L. Sampaio. On the Grundy number of a graph. In *Proceedings of the International Symposium on Parameterized and Exact Computation(IPEC)*, number 6478 of *Lecture Notes on Computer Science*, December 2010.
- [55] F. Havet and J.-S. Sereni. Channel assignment and improper choosability of graphs. In *Proceedings of WG'05 (June 2005)*, *Lecture Notes in Computer Science*, volume 3787, pages 81–90, 2005.
- [56] F. Havet and M. Wennink. The push tree problem. In *SPAA'01: 13th ACM Symposium on Parallel Algorithms and Architectures*, pages 318–319, 2001.

National conferences

- [57] J.-C. Bermond, O. Delmas, F. Havet, M. Montassier, and S. Pérennes. Réseaux de télécommunications minimaux embarqués tolérants aux pannes. In *5^e rencontres francophones sur les Aspects Algorithmiques des Telecommunications (ALGOTEL'2003)*, pages 27–32, Banyuls, France, Mai 2003.
- [58] J.-C. Bermond, F. Havet, F. Huc, and C. Linhares-Sales. Allocation de fréquences et coloration impropre des graphes hexagonaux pondérés. In *9^e rencontres francophones sur les Aspects Algorithmiques des Telecommunications (ALGOTEL'2007)*, Ile d'Oléron, France, Mai 2007.
- [59] J.-C. Bermond, F. Havet, and D. Tóth. Design of fault tolerant on board networks with priorities. In *3^e rencontres francophones sur les Aspects Algorithmiques des Telecommunications (ALGOTEL'2001)*, pages 95–98, Saint-Jean de Luz , France, Mai 2001.
- [60] F. Havet. Robustness of a routing tree for the push tree problem. In *4^e rencontres francophones sur les Aspects Algorithmiques des Telecommunications (ALGOTEL'2002)*, pages 81–86, Meze , France, Mai 2002.