Curriculum-vitae of Sylvain Gravier

Born in Lyon (France)   30 June 1967
Nationality   French

Education

Habilitation of University Joseph Fourier in Grenoble, 2002.
"Quelques liens entre des problèmes de théorie des graphes et de géométrie discrète"

PhD Thesis in Mathematics at University Joseph Fourier, 1996. Supervisors : Pierre Duchet and Frédéric Maffray.
"Coloration et Produits de Graphes"

Career

1993 – 1996 : Teaching Assistant at University Joseph Fourier in Grenoble
1996 – 1997 : *Postdoctoral Fellow* at Eötvös University of Budapest
1997 – 1998 : *Associate Professor* at Ingenering School in Applied Maths and Computer Science (ENSIMAG) of Grenoble
1998 – 2007 : Chargé de Recherche at CNRS (*Junior Researcher)*
2000 : Visiting Professor at Memorial University of Newfoundland
2003 - : Head of *Maths à Modeler* network sponsorised by French Ministry of Research via Grenoble-Alpes University.
2007 - : Directeur de Recherche at CNRS (*Senior Researcher)*

PhD thesis Supervised

1. . Simone Dantas de Souza (UFRJ) Brésil
2. . Julien Moncel (UJF) France
3. . Karine Godot (UJF) France
4. . Eric Duchêne (UJF) France
5. . Paul Dorbec (UJF) France
6. . Laurent Beaudou (UJF) France

7. . Nicolas Giroud (UJF) France

8. . Kahina Meslem (USTHB) Algéria

9. . Elise Vandomme (UL) Belgique

10. . Telma Silviera Para (UFRJ) Brésil

11. . Aline Parreau (UJF) France

12. . Ximena Colipan (UJF) France

13. . Simon Modeste (UJF) France

14. . Hébert Coelho (UFRJ) Brésil

15. . Souad Slimani (USTHB) Algéria

16. . Thomas Lecorre (UJF) France

17. . Martine Brilleaud (UJF) France

18. . Simon Schmidt (UJF) France

19. . Fernanda Couto (UFRJ) Brésil

20. . Lucas Pastor (INPG) France

21. . Marc Heinrich (UL) France

22. . Sinaly Dissa (UGA) France

Habilitation and PhD thesis reviewed

1. . Mohamed Kobeissi (UJF, 2001 – examinateur),

2. . Fabrice Bazzaro (Bordeaux I, 2005 – rapporteur),

3. . Pierre Charbit (Lyon I, 2005 – rapporteur),

4. . Frédéric Meunier (UJF, 2006 – examinateur),

5. . Fabrice Gonçalves (Bordeaux I, 2006 – rapporteur),

6. . Thèse d'état d'Ahmed Semri (USTHB, 2006 – rapporteur),

7. . HDR d'Olivier Togni (Dijon, 2006 – rapporteur),

8. . Benjamin Levêque (UJF, 2007 – examinateur),

9. . Sylvain Coulonge (Bordeaux I, 2007 – rapporteur),

10. . HDR de Ralf Klasing (Bordeaux I, 2009 – examinateur),

11. . HDR de Mario Valencia-Pabon (Villetaneuse, 2009 – rapporteur),

12. . Thomas Roche (UJF, 2010 – Président),

13. . David Auger (ENST, 2010 – Rapporteur),

14. . Cédric Joncour (Bordeaux I, 2010 – Rapporteur),

15. . Grégory Morel (Grenoble I, 2011 – Président),

16. . Julien Lemoine (Lille I, 2011 – Rapporteur),

17. . Simon Viennot (Lille I, 2011 – Examinateur),

18. . Julien Darlay (Grenoble I, 2011 – Président).

19. . Marwane Bouznif (Grenoble I, 2012 – président),

20. . Aline Castro (Grenoble I, 2012 – président),

21. . Mohammed Hosni (Lyon I, 2012 – président),

22. . Florent Foucaud (Bordeaux I, 2012 – examinateur),

23. . Habilitation de Paul Dorbec (Bordeaux I, 2013 – examinateur),

24. . Habilitation de Cécile Ouvrier Buffet (Créteil, 2013 – examinateur),

25. . Gabriel Renault (Bordeaux I, 2013 – rapporteur),

26. . Habilitation Eric Duchêne (Lyon I, 2015 – président).

Refereeing/Reviewing of Books and Manuscripts for:

« Mathematical Reviews » AMS, *Discrete Applied Mathematics*, *Discrete Mathematics*, *Journal of Graphs Theory*, *Graphs and Combinatorics*, *Annales de l'Institut Fourier*, *Information Processing Letters*, *Discussiones Mathematicae*, *Theoretical Computer Science ser A*, *Journal of Combinatorial Theory ser A*, *Journal of Combinatorial Theory ser B*, *Discrete and Computational Geometry*, *SIAM J. on Discrete Maths*, *Journal on Discrete Optimization*, *Electronic J. on Combinatorics*, *Experimental Maths*, *Ars Combinatoria*, *Advances in Applied Maths*, *Australasian J. on Maths*.

Participation to International cooperation programs

- 1997 : TEMPRA program between University Joseph Fourier of Grenoble and ELTE of Budapest.

- 1998 – 2000 CAPES/COFECUB French-Brazil

- 1999 CNRS and Science Academia of Praha

- 2000 : Balaton between Budapest and Grenoble

- 1999 – 2002 : Head of Proteus project between universities of Ljubljana and Grenoble. l'université de Ljubljana (Slovénie) et le laboratoire Leibniz (1999-2002).

- 2004 – 2006 : Proteus project between universities of Maribor (Slovénie) and Grenoble.

- 2005 – 2008 : Head of program CMEP between universities of Alger and Grenoble.

- 2006 – 2008 : Head of Balaton project between universities of Budapest and Grenoble.

Scientific comitties

- *Symposium in the memory of François Jaeger* Grenoble 1998.

- *6èmes journées Graphes et Algorithmes* – 2004 and 2011.

- *Francoro/Roadef* 2007 - Grenoble.

- « Workshop in Bordeaux on Identifying Codes », Bordeaux 2011.

- workshop « Codes and Discrete Probability », Grenoble 2007.

- LAGOS 2011, 2013 and 2015

- Bordeaux Graph Workshop 2012 and 2014.

- ICGT 2014 (Grenoble)

- ROADEF 2015

- *« workshop Games and Graphs »* Lyon, 2017.

Refereeing of Grants for

- Grenoble university
- Research ministry of Chili and Slovenia
- NSA-AMS
- IFCPAR/CEFIPRA (French-India)
- ECOS-Sud (French-Argentina)
- Member of FQRSC from Canada (2004-2005)

Research Grants approved

- 2009 – 2011 : Head for Grenoble of ANR IDEA
- 2010 – 2012 : Head for Grenoble of ANR GraTel
- 2014 – 2017 : Head for Grenoble of ANR GAG
- Since 2003, head of the network « maths à modeler » (actually 20 000 € per year).

Publications

1- S. Gravier, A. Khelladi. On the Domination Number of Cross Products of Graphs. *Discrete Mathematics*. *145 (1995) 273-277*.

2- S. Gravier. A Hajós-like Theorem for List-Coloring. *Discrete Mathematics 152 (1996) 299-302*.

3- H. Ait Haddadene, S. Gravier. On Weakly Diamond-free graphs. *Discrete Mathematics 159 (1996) 237-240*.

4- S. Gravier, F. Maffray. The Choice Number of 3-Colorable Elementary Graphs. *Discrete Mathematics 165-166 (1997) 343-348.* Actes de International Conference on Graphs and Combinatorics, CIRM, Marseille-Luminy.

5- S. Gravier. Hamiltonicity of the cross product of two graphs. *Discrete Mathematics 170 (1997) 253-257.*

6- S. Gravier, M. Mollard. Note on domination numbers of Cartesian product of paths. *Discrete Applied Mathematics 80 (1997) 247-250.*

7- H. Ait Haddadene, S. Gravier, F. Maffray. An algorithm for coloring some perfect graphs. *Discrete Mathematics 183 (1998) 1-16.*

8- S. Gravier, F. Maffray. Graphs whose Choice Number is Equal to their Chromatic Number. *Journal of Graph Theory 27 (1998) 1-11.*

9- S. Gravier, M. Mollard, C. Payan. Nonexistence theorem of 3-dimensional tiling in Lee-metric. *European Journal of Combinatorics 19 (1998) 567-572.*

10- M. Dror, G. Finke, S. Gravier, W. Kubiak. On the complexity of a restricted list-coloring problem. *Discrete Mathematics 195 (1999) 103-109.*

11- R. Cherifi, S. Gravier, X. Lagraula, C. Payan, I. Zighem. On the cross product of paths. *Discrete Applied Mathematics 94 (1-3) (1999) 101-139.*

12- S. Gravier. On Tucker vertices of graphs. *Discrete Mathematics 203 (1-3) (1999) 121-131.*

13- S. Gravier, M. Mollard, C. Payan. Variations on tilings in Manhattan metric. *Geometriae Dedicata 76 (3) (1999) 265-274.*

14- M. Dror, G. Finke, S. Gravier, W. Kubiak. On the complexity of a restricted list-coloring problem. *CRM Proceeding and Lecture Notes, Vol 23 (1999) 35-41.*

15- G. Cohen, S. Gravier, I. Honkala, A. Lobstein, M. Mollard, C. Payan, G. Zémor. Improved identifying codes for the grids. *Electronic J. of Combinatorics vol. 6 (1) (1999) [http://www.combinatorics.org/Volume_6/Html/v6i1r19.html].*

16- R. Chérifi, S. Gravier, I. Zighem. Bounds on domination numbers of grid graphs. *Ars Combinatoria* Vol. LX, July, 2001.

17- S. Gravier, M. Mollard, C. Payan. Nonexistence theorem of 3-dimensional tiling in Lee-metric II. *Discrete Mathematics 235 (2001) 151-157.*

18- S. Gravier. Tilings and Isoperimetrical Shapes II : Hexagonal lattice. Manuscrit, Mai 1999. *Acta Univ. Palacki. Olomuc., Fac. rer. nat., Mathematica* 40 (2001), 79-92.

19- S. Gravier, C. Payan. Tilings and Isoperimetrical Shapes I : Square lattice. Manuscrit, Mai 1999. *Acta Univ. Palacki. Olomuc., Fac. rer. nat., Mathematica* 40 (2001), 63-77.

20- C. de Figueiredo, S. Gravier, C. Linhares Sales. A generalization of Tucker's proof for (K_4-e)-free Perfect Graphs. *Discrete Mathematics* (232) 1-3 (2001), 105-108.

21- S. Gravier, C. Payan. Pentomino exclusion problem. *Discrete and Computational Geometry* 26 (2001), 375-386.

22- S. Gravier, D. Kobler, W. Kubiak. Complexity of list coloring problems with a fixed total number of colors. *Discrete Applied Mathematics* (2002) 117/1-3 pp. 65-79.

23- S. Elhiaou, S. Gravier, C. Payan. Signed Flips and Heawood signature. *J. Combin. Theory ser. B* 84 (2002), pp. 118-125.

24- S. Gravier. Total domination number of grid graphs. *Discrete Applied Mathematics* (2002) 121/1-3 pp. 119-128.

25- S. Gravier, C. Payan. Flips signés et triangulations d'un polygone. *J. Europ. de Combin.* (2002) 23 pp. 817-821.

26- C. Benzaken, S. Gravier, R. Skrekovski. Hajós' theorem for list colorings of hypergraphs. *Discussiones Mathematicae - Graph Theory* (2003) 23 pp. 207-213.

27- S. Dantas, S. Gravier, F. Maffray. Extremal graphs for Nordhaus-Gaddum Theorem. *Discrete Applied Mathematics* 141 (2004), 93-101.

'http://www-leibniz.imag.fr/LesCahiers/2OOO/Cahier18/ResumCahier18.html'

28- S. Gravier, S. Klavzar, M. Mollard. Subdivided wheels and quasi-cube. *Discrete Mathematics* 269 (2003) pp. 287-293.

'http://www-leibniz.imag.fr/LesCahiers/2001/Cahier36/ResumCahier36.html'

29- S. Gravier, F. Maffray, B. Mohar. On a list-coloring problem. *Discrete Mathematics* 268 (2003) pp. 303-308.

'http://www-leibniz.imag.fr/LesCahiers/2001/Cahier33/ResumCahier33.html'

30- S. Gravier, Jeannette Janssen, Kyriakos Kilakos, Sulamita Klein. Graph covers using t-colourable vertex sets. *Discrete Mathematics* 278 (2004) pp. 61-80.

'http://www-leibniz.imag.fr/LesCahiers/2001/Cahier27/ResumCahier27.html'

31- S. Gravier, C. Hoáng, F. Maffray. Coloring the maximal cliques of graphs with restricted path length. *Discrete Maths* 272 (2003) pp. 285-290.

32- S. Gravier, M. Mhalla, E. Tannier. On a modular domination game. *Theoretical Computer Science ser. A.* 306 (2003), pp. 291-303.

'http://www-leibniz.imag.fr/LesCahiers/2002/ResumCahier39.html'

33- G. Bacsó, S. Gravier, A. Gyarfás, M. Preissmann, A. Sebö. Coloring the maximal cliques of a graph. *SIAM J. on Discrete Maths* 17 (2004), number 3, pp. 361-376.

'http://www-leibniz.imag.fr/LesCahiers/2001/Cahier32/ResumCahier32.html'

34- S. Gravier, F. Maffray. On the choice number of claw-free perfect graphs. *Discrete Maths* 276 (2004), pp. 211-218.

'http://www-leibniz.imag.fr/LesCahiers/2OOO/Cahier6/ResumCahier6.html'

35- S. Gravier, F. Maffray, J. Renault, N. Trotignon. Local properties of large collections of sets. *European Journal of Combinatorics* 25, Issue 5 (2004), pp. 719-734 .

'http://www-leibniz.imag.fr/LesCahiers/Cahier60/ResumCahier60.html'

36- M. Daniel, S. Gravier, J. Moncel. Identifying Codes in Some Subgraphs of the Square Lattice. *Theoretical Comput. Science A.*, vol 319, Issues 1-3 (2004), pp. 411-421.

'http://www-leibniz.imag.fr/LesCahiers/Cahier77/ResumCahier77.html'

37- S. Dantas de Souza, C.M.H. de Figueiredo, S. Gravier, S. Klein, B.A. Reed. Stable Skew partition problem. *Discrete Applied Mathematics* 143 (2004), pp. 17-22.

38- S. Gravier, S. Klavzar, M. Mollard. Codes and L(2,1)-labelings in Sierpi´nski graphs. *Taiwan J on Maths* 9, n°4 (2005), pp. 671-681.

39- S. Dantas de Souza, C.M.H. de Figueiredo, S. Gravier, S. Klein. Finding H-partitions efficiently. *RAIRO – Theoretical Informatics and Applications* 39 (2005), pp. 133-144.

40- S. Gravier, J. Moncel. Construction of Codes Identifying Sets of Vertices. *Electronical J. on Combin* vol 12(1) (2005), R13.

41- P. Dorbec, S. Gravier, S. Klavzar, S. Scapacan. On total domination of direct products of graphs. *Discuss. Math. – Graph Theory* 26 (2006), pp. 103-112

42- L. Blanc, E. Duchêne, S. Gravier. Pick-edge game. *INTEGERS Elect. J. on Combin. Number Th.* 6 (2006), #G02.

43- I. Charon, S. Gravier, O. Hudry, A. Lobstein, M. Mollard and J. Moncel. A Linear Algorithm for Minimum 1-Identifying Codes in Oriented Trees. *Discrete Applied Maths* 154, Issue 8, (2006), pp. 1246-1253.

44- Y. Carbonneau, S. Gravier, A. Khelladi, A. Semri. Coloring Fiber Product of Graphs. *AKCE Int. J. on Graphs and Combinatoric* Volume 3 Number 1 (2006).

45- S. Gravier, J. Moncel, A. Semri. Identifying codes of cycles. *Journal Européen de Combinatoire* 27, No.5 (2006), pp. 767-776.

46- P. Dorbec, S. Gravier. On Open Packing and Total Coverings of Two Dimensional Grid Graphs. *Geombinatorics* vol XV (4) (2006), pp. 160-165.

47- L. Faria, S. Gravier, C.M. Herrera de Figueiredo, C.F.X. Mendonca et J. Stolfi. Nonplanar vertex deletion: maximum degree thresholds for NP/Max SNP-hardness and a 3/4-approximation for finding maximum planar induced subgraphs. *Discrete Applied Maths,* Volume 154, Issue 13, 15 (2006), pp. 1774-1782.

48- S. Gravier, P. Jorrand, M. Mhalla, C. Payan. Quantum octal Grame. *International Journal of Foundations of Computer Science*, Vol. 17, No. 4 (2006), pp. 919-931.

49- S. Gravier, B. Ycart. S-constrained random matrices. Mathematics and Computer Science IV, P. Chassaing et al. Eds., *Disc. Maths. and Theoretical Comput. Sc* (2006), pp. 357-364.

50- S. Dantas de Souza, C.M.H. de Figueiredo, S. Gravier, S. Klein. Extended Skew partition problem. *Discrete Maths* vol. 306, n° 19-20, (2006), pp. 2438-2449.

51- S. Gravier, J. Moncel, C. Payan. A generalization of the Pentomino Exclusion Problem : the Δ-dislocation in graphs. *Discrete Maths* vol. 307, n° 3-5, (2007), pp. 435-444.

52- S. Gravier, J. Moncel. On graph having V-x as an identifying code. *Discrete Maths* vol. 307, n° 3-5, (2007), pp. 432-434.

53- P. Dorbec, S. Gravier, M.A. Henning. Paired-domination in generalized claw-free graphes. *J. on Combinatorial Optimization* vol. 14, n°1, (2007), pp. 1-7.

54- P. Dorbec, S. Gravier, G. Sarközy. Monochromatic Hamiltonian t-tight Berge-cycles in hypergraphs. *Journal of Graph Theory 59* (2008), 34-44.

55- M. El-Zahar, S. Gravier, A. Klobucar. On the Total Domination Number of Cross Products of Graphs. *Discrete Maths,* Vol 308, 10 (2008), pp. 2025-2029.

56- L. Beaudou, S. Gravier, K. Meslem. Subdivided complete graphs and quasi-cube. *SIAM J. Discrete Maths 22* (2008), 1226-1238.

57- S. Gravier, R. Klasing, J. Moncel. Hardness results and approximation algorithms for identifying codes and locating-dominating codes in graphs. *Algorithmic of Operationnal Research* (2008), Vol. 3, No. 1, 43-50.

58- Y. Ben-Haim, S. Gravier, A. Lobstein, J. Moncel. Adaptatif identifying codes. *J. Combin. Th. Ser A*, 115 (2008), pp. 1114-1126.

59- S. Gravier, J. Moncel, A. Semri. Identifying codes of Cartesian product of two cliques. *Electronic J. on Combinatorics* 15 (2008), N4.

60- P. Dorbec, E. Duchêne, S. Gravier. Solitaire Clobber Game on Hamming graphs. *INTEGERS Elect. J. on Combin. Number Th.* 8 (2008), G03.

61- P. Dorbec, S. Gravier. Paired-domination in graphs with no long induced paths. *Graphs and Combinatorics 24*, 4 (2008), pp. 303-308.

62- S. Gravier, Ch. Payan, M-N. Colliard. Maths à Modeler : pavages par de dominos. *Grand N 82* (2008)

63- P. Dorbec, S. Gravier, I. Honkala, M. Mollard. Weighted codes in Lee metric. *Codes, Design and Cryptography*, 52, (2), (2009), pp. 209-218.

64- E. Duchêne, S. Gravier, M. Mhalla. Combinatorial graph games. *Ars Combinatoria* 90 (2009), pp. 33-44.

65- L. Beaudou, S. Gravier, K. Meslem. Isometric embedding in Hamming graphs. *European J. Combinatorics*, Volume 30 (2009), pp 1062-1070.

66- E. Duchêne, S. Gravier. A Generalization of Whytoff Game. *Discrete Maths* 309, No. 11, 3595-3608 (2009).

67- L Beaudou, P. Dorbec, S. Gravier, J. Pranava. Planarity of Kronecker product by K_2. *Discrete Maths, Algorithms and Applications* 1, No. 1, 85-104 (2009).

68- E. Duchêne, A.S. Fraenkel, S. Gravier, R. Nowakowski. Another bridge between Nim and Wythoff. *Australasian J. on Combinatorics*, 44, (2009), pp. 43-56.

69- E. Duchêne, S. Gravier, J. Moncel. Solitaire Clobber on graphs. *RAIRO – Theoretical Informatics and Applications, 43(4)*, (2009), pp. 463-482.

70- M. Aïder, S. Gravier, K. Meslem. Isometric embeddings of subdivided connected graphs into hypercube. *Discrete Maths* 309, (2009), pp. 6402–6407.

71- P. Dorbec, S. Gravier. Paired domination in generalized claw-free graphs. *Graphs and Combin* Vol 26, 1, (2010), pp. 43-49.

72- L. Beaudou, S. Gravier, S. Klavzar, M. Kovse, M. Mollard. Covering codes in Sirpinski graphs. *Discrete Maths and Theoretical Comput. Sc 12 (3)* (2010), pp. 43-49.

73- S. Gravier. La chasse à la bête. Article invité dans le $25^{ème}$ *Bulletin de la RAIRO* (2010).

74- S. Gravier, S. Modeste, C. Ouvrier-Buffet. Algorithmique et apprentissage de la preuve. *Repère IREM 79* (2011)*, pp. 51-72.

75- Y. Ben-Haim, S. Gravier, A. Lobstein, J. Moncel. Adaptive Identification in Torii in the King Lattice. *Elec. J. on Combin. 18* (2011).

76- N. Giroud, S. Gravier. Preuve mathématique : induction et absurde. Dans l'ouvrage collectif *« Preuve. Du mot au concept »*, PUG (2011).

77- O. Delmas, S. Gravier, M. Montassier, A. Parreau. On two variations on identifying codes. *Discrete Mathematics* (2011) 311 17 1948-1956.

78- L. Esperet, S. Gravier, M. Montassier, P. Ochem et A. Parreau. Locally identifying coloring of graphs. *Electronic Journal of Combinatorics*, 19(2), 2012.

79- S. Gravier, A. Lacroix et S. Souad. (a, b)-code in Z/nZ. *Discrete applied Maths*, 161(4-5), (2013), pp. 612-617.

80- F. Foucaud, S. Gravier, R. Naserasr, A. Parreau et P. Valicov. Identifying codes in line graphs. *Journal of Graph Theory*, vol 73 (4), pp. 425--448 (2013).

81- S. Gravier, M. Kovse, M. Mollard, J. Moncel et A. Parreau. New results on variants of covering codes in Sierpinski graphs. *Designs, Codes and Cryptography,* (2013)*, Volume 69, Issue 2, pp 181-188.

82- N. Brauner, S. Gravier, L-P Kronek, F. Meunier. LAD models, trees, and an analog of the fundamental theorem of arithmetic. Discrete Applied Maths, vol 161 (7-8) (2013), pp. 909-920.

83- S. Dantas de Souza, S. Gravier, T. Para. Strong reducibility of Solitaire Clobber played on Cartesian product of graphs. Accepté à Matemática Contemporânea.

84- S. Dantas de Souza, S. Gravier, T. Para. Solitaire Clobber on Circulant Graphs. Discrete Maths 329, 33-41 (2014).

85- S. Gravier, S. Janson, T. Laihonen, S. Maarit Ranto: Graphs where every k-subset of vertices is an identifying set. *Discrete Mathematics & Theoretical Computer Science* 16(1): 73-88 (2014)

86- L. Beaudou, E. Duchêne,, S. Gravier. A survey on Solitaire Clobber. *« Games of No Chance 4 »* Cambridge University Press, Cambridge, (2015).

87- S. Dantas de Souza, S. Gravier, T. Para. Solitaire Clobber played on Cartesian

product of graphs. *Discrete Applied Maths* 182 : 84-90 (2015).

88- S. Gravier, J. Javelle, M. Mhalla, S. Perdrix. On weak odd domination and graph-based quantum secret sharing. *Theoretical Computer Science* 598, pp. 129-137 (2015).

89- S. Gravier, M. Mollard, S. Špacapan, S.S. Zemljič. On disjoint hypercubes in Fibonacci cubes. *Discrete Applied Mathematics*. Vol. 190, p50-55 (2015).

90. S. Gravier, A. Parreau, S. Rottey, L. Storme, E. Vandomme. Identifying codes in vertex-transitive graphs and strongly regular graphs. *Electron. J. on Combin, 22(4)* (2015).

91- H. Coelho, L. Faria, S. Gravier, S. Klein. Oriented coloring in planar, bipartite, bounded degree 3 acyclic oriented graphs. *Discrete Applied Maths,* 198 pp. 109-117, (2016).

92. M. Aïder, S. Gravier, S. Slimani. Relaxed Locally Identifying coloring of graphs. *Graphs and Combinatorics*, 32(5), p 1651-1665 (2016).

93. S. Gravier, F. Maffray, L. Pastor. On the choosability of claw-free perfect graphs. *Graphs and Combinatorics*, 32(6), p. 2393-2413 (2016).

94. F. Couto, L. Faria, S. Gravier, S. Klein. On the forbidden induced subgraph probe and sandwich problems. Accepté dans *Discrete Applied Mathematics* (2016).

95. C. Charpentier, S. Gravier, Th. Lecorre. Trinque Problem: Covering complete graphs by plane degree-bounded hypergraphs. *J. Comb. Optim.* 33(2): 543-550 (2017).

96. S. Gravier, K. Meslem, S. Slimani, S. Schmidt. A New Game Invariant of Graphs: the Game Distinguishing Number. Discrete *Math. Theor. Comput. Sci.*, March 2, (2017), Vol 19 no. 1.

97. S. Gravier, E Vandomme. 2-constant labelling. A paraître dans *Discussiones Math*.

98. S. Gravier, K. Meslem, S. Slimani, S. Schmidt. Game Distinguishing Numbers of Cartesian Products. *Ars Mathematica Contemporanea* vol. 14 n°1 (2018).

99. S. Gravier, S. Schmidt, S. Slimani. Twins and Vertex- Identification on Graphs. A paraître dans Open J. on Discrete Maths.

Principal Invited Speaker on Conferences

1. Séminaire de Mathématiques Supérieures, 35ème session sur le thème "*Symétrie de graphes : méthodes algébriques et application*", Montréal (Canada), juillet 1996.

2. Third International Colloquium on Graphs and Optimisation (GOIII) : "*Domination numbers of the cross product of paths*", Leukerbad (Suisse), août 1996.

3. Workshop on Graph Coloring and Applications : "*On the complexity of a restricted list-coloring problem*", Montréal (Canada), mai 1997.

4. Workshop on Graph Coloring : "*Coloring the maximal cliques of a graph*", Rutgers (USA), août 1998.

5. Journées Graphes / Graph Days : « *Pour bien jouer, le roi doit savoir parler aux dames* », Orsay, juin 2003.

6. Dagstuhl-Seminar : *« Graphs coloring »*, International Conference and Research Center for Computer Science, Schloss Dagstuhl, Wadern, Allemagne, septembre 2003.

7. Conférence plénière lors de l'édition 2008 des journées montoises d'Informatique Théorique : *« A new combinatorial game : the Clobber »*, août 2008.

8. *Choose your favorite combinatorial optimization problem and make a game …* Journées de mathématiques discrètes, 2015 à Liège.

Popularization of maths and computer science

- Since 1999, I manage 1 to 4 Math.en.Jeans workshop in highschool : kind of mathematical research club for pupils during one year school.

- Since 2004, I manage between 2 and 4 « maths à modeler » workshops in elementary or secondary school. At the end of the workshop, we organize a « maths à modeler – junior » seminar at Grenoble university.

- 2006 : Conférence at muséum d'histoires naturelles de Lyon, during exhibit « Pourquoi les Maths ? ».

- 2007 – 2008 : Participation to cafés des sciences in cities closed to Grenoble

- 2007 : part of the tv show in CAP INFOS (Rhône) : « Qui à peur des Maths ? »

- 2007 : Conférence Université Inter-Age « Maths à Modeler »

- 2008 : interview in « Le journal des femmes du 4 janvier 2008 » →
    http://www.linternaute.com/femmes/famille/conseils/0712-maths.shtml

- Since 2007, I used to give conferences in highschool.

- 2009 : one week of capsules for Radio Bleu Isère.p

- From april to june 2012 I participated to a scientific show at the radio RCF – isère.

- Since 2006, I used to give Conférence for grand public : 2 en 2013 at théâter of Tournon sur Rhône and at Nevers. One more in 2017 at les Clévos in Etoile sur Rhône.

- participation at festival de mathématiques du Brésil à Rio (2017).