

Samuel FIORINI

Curriculum Vitae

111 rue de la vignette
1160 Brussels, Belgium
Belgian citizen
Born: May 3, 1975
Married, 2 children

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Education

- 1997–2001** Université Libre de Bruxelles
Thesis: “*Polyhedral Combinatorics of Order Polytopes*”
PhD in Mathematics
Advisor: J.-P. Doignon
- 1995–1997** Université Libre de Bruxelles
Thesis: “*Le polytope des Ordres Partiels*”
Final grade (2nd year): *La Plus Grande Distinction*
Final grade (1st year): *Grande Distinction*
Licence (Master’s degree)
Mathematical Sciences
Advisor: J.-P. Doignon
- 1993–1995** Université Libre de Bruxelles
Final grade (2nd year): *La Plus Grande Distinction*
Final grade (1st year): *La Plus Grande Distinction*
Candidature (Bachelor’s degree)
Mathematical Sciences

Positions Held

- 2005/1–present** Université Libre de Bruxelles, Department of Mathematics
Chargé de Cours (Associate Professor)
- 2004/1–2004/12** McGill University, Department of Mathematics and Statistics, and
Groupe d’études et de recherche en analyse des décisions (HEC Montréal)
Post-Doctoral Researcher
Funded by the FNRS as *Collaborateur Scientifique* 2004/1–2004/9, and
Chargé de Recherche 2004/9–2004/12
- 2003/1–2003/12** Massachusetts Institute of Technology (MIT)
Research Associate
Funded by the BAEF as Fellow 2003/1–2003/9, and
the FNRS as *Collaborateur Scientifique* 2003/10–2003/12
- 2002/1–2003/1** Université Libre de Bruxelles, Department of Mathematics
Assistant (Teaching Assistant)
- 2001/8–2001/12** Technische Universiteit Eindhoven, and
Centrum voor Wiskunde en Informatica (CWI)
Post-Doctoral Researcher
Funded by the European Community via DONET
- 1997/10–2001/7** Université Libre de Bruxelles, Department of Mathematics
Assistant (Teaching Assistant)

Teaching

At Université Libre de Bruxelles (ULB):

• Courses

- 2011–2012** *Algèbre linéaire et géométrie* (MATH-F-102), with J. Schillewaert (36 hours out of 72)
Mathématiques discrètes (MATH-F-307) (36 hours)
Mathématique combinatoire (MATH-F-319) (24 hours)
Didactique des mathématiques II (MATH-F-501) (12 hours)
- 2010–2011** *Algèbre linéaire et géométrie* (MATH-F-102), with J. Schillewaert (36 hours out of 72)
Mathématiques discrètes (MATH-F-307) (36 hours)
Polytopes convexes (MATH-F-408) (24 hours)
Advanced complexity and approximation algorithms (INFO-F-421), with J.-F. Raskin (12 hours out of 24)
Didactique des mathématiques II (MATH-F-501) (12 hours)
- 2009–2010** *Mathématiques* (MATH-F-108), with E. Lami Dozo (48 hours out of 84)
Algèbre linéaire et géométrie (MATH-F-102), with J. Doyen (48 hours out of 72)
Mathématique combinatoire (MATH-F-319) (24 hours)
Matières avancées de complexité et algorithmes d'approximation (INFO-F-421), with J.-F. Raskin (12 hours out of 24)
Graphes et réseaux (INFO-F-521) (24 hours)
- 2008–2009** *Algèbre linéaire et géométrie* (MATH-F-102), with J. Doyen (48 hours out of 72)
Matières avancées de complexité et algorithmes d'approximation (INFO-F-421), with J.-F. Raskin (12 hours out of 24)
Graphes et réseaux (INFO-F-521) (24 hours)
- 2007–2008** *Matières avancées de complexité et algorithmes d'approximation* (INFO-F-421), with J.-F. Raskin (12 hours out of 24)
Graphes et réseaux (INFO-F-521) (24 hours)
- 2006–2007** *Graphes et polytopes (DEA interuniversitaire en mathématique)*, with J.-P. Doignon (9 hours out of 15)
Mathématiques Combinatoires (MATH-F-206) (24 hours)
- 2005–2006** *Polytopes zéro-un (DEA interuniversitaires en mathématique et en informatique)*, with J.-P. Doignon, M. Labbé and M. Van Vyve (6 hours out of 15)

- Exercises

- 2008–2009** *Travaux préparatoires au mémoire* (MEMO-F-400), *Géométrie* (MATH-F-303), *Mathématiques* (MATH-F-108)
- 2007–2008** *Optimisation* (MATH-F-306), *Mathématiques Combinatoires* (MATH-F-206), *Mathématiques* (MATH-F-108)
- 2006–2007** *Optimisation* (MATH-F-306), *Algèbre linéaire et géométrie 2* (MATH-F-202), *Mathématiques* (MATH-F-108) (1.5 groups)
- 2005–2006** *Mathématiques Combinatoires* (MATH-F-206), *Mathématiques* (MATH-F-108) (1.5 groups), *Algèbre linéaire et géométrie 1* (MATH-F-102)
- 2004–2005** *Mathématiques* (MATH-F-108) (.5 groups), *Algèbre linéaire et géométrie 1* (MATH-F-102) (.5 groups)
- 2002–2003** *Eléments de mathématiques* (Math127) (.5 groups), *Mathématiques générales* (Math052) (.5 groups), *Géométrie Analytique* (Math014) (.5 groups)
- 2001–2002** *Eléments de mathématiques* (Math127) (.5 groups), *Algorithmique Mathématique* (Info127) (.5 groups)
- 2000–2001** *Mathématiques générales* (Math055), *Géométrie Supérieure* (Math016), *Algorithmique Mathématique* (Info127)
- 1999–2000** *Mathématiques générales* (Math052) (2 groups), *Géométrie Supérieure* (Math016), *Algorithmique Mathématique* (Info127)
- 1998–1999** *Mathématiques générales* (Math055), *Mathématiques générales* (Math052), *Géométrie Analytique* (Math014), *Algorithmique Mathématique* (Info127)
- 1997–1998** *Mathématiques générales* (Math055), *Mathématiques générales* (Math052), *Géométrie Analytique* (Math014), *Algorithmique Mathématique* (Info127)

Theses advised

- PhD theses

- 2011–present** Advisor of the PhD thesis of Selim Rexhep (ULB/math)
- 2010–present** Advisor of the PhD thesis of Eglantine Camby (ULB/math)
- 2007–2010** Advisor of the PhD thesis of Céline Engelbeen
“The segmentation problem in radiation therapy” (ULB/math)

• Master’s theses

- 2011–2012** Co-advisor with G. Joret of the Masters thesis of Audrey Herinckx (ULB/math)
- 2010–2011** Co-advisor with J.-P. Doignon of the Masters’ thesis of Selim Rexhep (ULB/math)
Co-advisor with J.-P. Doignon of the Masters’ thesis of Daniel De Wit (ULB/math)
- 2009–2010** Co-advisor with J. Cardinal of the Masters’ thesis of Christophe Dumeunier (ULB/cs)
Co-advisor with J.-P. Doignon of the Masters’ thesis of Marie Heyvaert (ULB/math)
- 2006–2007** Advisor of the *Mémoire de Licence* of Lionel Magdelyns (ULB/math)
- 2005–2006** Advisor of the *Mémoire de Licence* of Thomas Vermassen (ULB/cs)
Co-advisor with M. Labbé of the *Mémoire de Licence* of Céline Engelbeen (ULB/math)
Co-advisor with M. Labbé of the *Mémoire de Licence* of Valérie Vandebroeck (ULB/math)
- 2001–2002** Co-advisor with J.-P. Doignon of the *Mémoire de Licence* of Julie Christophe (ULB/math)

Theses juries

Has been member of the jury for the following PhD theses:

Jean-Luc Michel (ULB, Jun. 2011) • Nicolas Gillis (UCL/INMA, Feb. 2011) • Antje Kiesel (Universität Rostock, Jan. 2011) • Céline Engelbeen (*advisor*, ULB/math, Jun. 2010) • Martha Salazar Neumann (ULB/math, Dec. 2009) • Eythan Levy (ULB/cs, Mar. 2009) • Géraldine Heilporn (ULB/math, Oct. 2008) • Karim Douieb (ULB/cs, Sep. 2008) • Anthony Labarre (ULB/math, Sep. 2008) • Gwenaël Joret (ULB/cs, Dec. 2007) • Nicolas Bougard (ULB/math, Jun. 2007) • Sébastien Collette (ULB/cs, Nov. 2006) • Julie Christophe (ULB/math, Sep. 2006)

Research grants

- 2011–2012** *Crédit aux chercheurs FNRS*
“Lower bounds for extended formulations”
- 2008–2011** *Crédit aux chercheurs FNRS*
“Combinatoire polyédrique : transversaux des cycles, $\{0, 1/2\}$ -coupes”
- 2006–2010** ARC Project “On the geometry of hard problems”
Funded by the *Communauté française de Belgique*
co-PIs: J. Cardinal, J.-P. Doignon, S. Langerman, D. Leemans, M. Labbé

Postdoctoral researchers

- 2010–2013** Hans Raj Tiwary (↓ MPI Saarbrücken ↓ TU Berlin ↓ EPFL)
2010–2011 Nikolaus Mutsanas (↓ IDSIA, Istituto Dalle Molle di Studi sull'Intelligenza Artificiale)
2007–2009 Dirk Oliver Theis (↓ Universität Heidelberg, ↑ Universität Magdeburg)
2009 Ugo Pietropaoli (↓↑ Università di Roma “Tor Vergata”)

Visiting professors

- 2011–2012** Dimitrios Thilikos (↓↑ Capodistrian and National University Athens)
Funded by a *Crédit “Mission scientifique” FNRS*

Publications

• Articles published in international journals

- [31] “Approximating the balanced minimum evolution problem”, with Gwenaël Joret, *Operations Research Letters*, conditionnally accepted for publication, <http://arxiv.org/abs/1104.1080>
- [30] “The polyhedron of all representations of a semiorder”, with Barry Balof and Jean-Paul Doignon, *Order*, accepted for publication
- [29] “Minimum Entropy Combinatorial Optimization Problems”, with Jean Cardinal and Gwenaël Joret, accepted for publication in *Theoretical Computer Science*
- [28] “A closest vector problem arising in radiation therapy planning”, with Céline Engelbeen and Antje Kiesel, accepted for publication in the *Journal on Combinatorial Optimization*
- [27] “The Stackelberg minimum spanning tree game”, with Jean Cardinal, Erik Demaine, Gwenaël Joret, Stefan Langerman, Ilan Newman and Oren Weimann, *Algorithmica*, Vol. 59, pages 129–144, 2011
- [26] “The VPN problem with concave costs”, with Gianpaolo Oriolo, Laura Sanità and Dirk Oliver Theis, *SIAM Journal on Discrete Mathematics*, Vol. 24, pages 1080–1090, 2010
- [25] “An efficient algorithm for partial order production”, with Jean Cardinal, Gwenaël Joret, Raphaël Jungers and Ian Munro, *SIAM Journal on Computing*, Vol. 39, electronically republished in May 2010 (DOI: 10.1137/090759860)
- [24] “Constrained Decompositions of Integer Matrices and their Applications to Intensity Modulated Radiation Therapy”, with Céline Engelbeen, *Networks*, Vol. 55, pages 138–148, 2010
- [23] “On the feedback vertex set polytope of a series-parallel graph”, with Odile Marcotte, *Discrete Optimization*, Vol. 6, pages 271–287, 2009
- [22] “On a theorem of Sewell and Trotter”, with Gwenaël Joret, *European Journal of Combinatorics*, Vol. 30, pages 425–428, 2009
- [21] “Weighted graphs defining facets: A connection between stable set and linear ordering polytopes”, avec Jean-Paul Doignon et Gwenaël Joret, *Discrete Optimization*, Vol. 6, pages 1–9, 2009

- [20] “Minimum Entropy Orientations”, with Jean Cardinal and Gwenaël Joret, *Operations Research Letters*, Vol. 36, pages 680–683, 2008
- [19] “Minimum Entropy Coloring”, with Gwenaël Joret and Jean Cardinal, *Journal of Combinatorial Optimization*, Vol. 16, pages 361–377, 2008
- [18] “Planar graph bipartization in linear time”, with Nadia Hardy, Bruce Reed and Adrian Vetta, *Discrete Applied Mathematics*, Vol. 156, pages 1175–1180, 2008
- [17] “Tight results on minimum entropy set cover”, with Jean Cardinal and Gwenaël Joret, *Algorithmica*, Vol. 51, pages 49–60, 2008
- [16] “Approximate min-max relations for odd cycles in planar graphs”, with Nadia Hardy, Bruce Reed and Adrian Vetta, *Mathematical Programming Series B*, Vol. 110, pages 71–91, 2007
- [15] “ $\{0, 1/2\}$ -cuts and the linear ordering problem: surfaces that define facets”, *SIAM journal on Discrete Mathematics*, Vol. 20, pages 893–912, 2006
- [14] “A note on the precedence-constrained class sequencing problem”, with José Correa and Nicolás Stier-Moses, *Discrete Applied Mathematics*, Vol. 155/3, pages 257–259, 2006
- [13] “Facets of the linear ordering polytope: a unification for the fence family through weighted graphs”, with Jean-Paul Doignon and Gwenaël Joret, *Journal of Mathematical Psychology*, Vol. 50, pages 251–262, 2006
- [12] “How to recycle your facets”, *Discrete Optimization* Vol. 3, pages 136–153, 2006
- [11] “The biorder polytope”, with Julie Christophe and Jean-Paul Doignon, *Order*, Vol. 21, pages 61–82, 2004
- [10] “The facets and the symmetries of the approval-voting polytope”, with Jean-Paul Doignon, *Journal of Combinatorial Theory (Series B)*, Vol. 92, pages 1–12, 2004
- [9] “A short proof of a theorem of Falmagne”, *Journal of Mathematical Psychology*, Vol. 48, pages 80–82, 2004
- [8] “Weak order polytopes”, with Peter C. Fishburn, *Discrete Mathematics*, Vol. 275, pages 111–127, 2004
- [7] “Extendability of cyclic orders”, with Peter Fishburn, *Order*, Vol. 20, pages 151–171, 2003
- [6] “Counting biorders”, with Julie Christophe and Jean-Paul Doignon, *Journal of Integer Sequences* (electronic journal), Vol. 6, Article 03.4.3 (10 pages), 2003
- [5] “Facets of linear signed order polytopes”, with Peter C. Fishburn, *Discrete Applied Mathematics*, Vol. 131, pages 597–610, 2003
- [4] “The Approval-Voting Polytope: Combinatorial Interpretation of the Facets”, with Jean-Paul Doignon, *Mathématiques et Sciences Humaines*, Vol. 161, pages 29–39, 2003
- [3] “A Combinatorial study of partial order polytopes”, *European Journal of Combinatorics*, Vol. 24, pages 149–159, 2003
- [2] “Facets of the weak order polytope derived from the induced partition projection”, with Jean-Paul Doignon, *SIAM journal on Discrete Mathematics*, Vol. 15, pages 112–121, 2002

- [1] “Determining the automorphism group of the linear ordering polytope” *Discrete Applied Mathematics*, Vol. 112, pages 121–128, 2001

• **Articles published in the proceedings of conferences with refereeing**

- [[13]] “Optimal Algorithms For Segment Minimization With Small Maximal Value”, with Therese Biedl, Stephane Durocher, Céline Engelbeen and Maxwell Young, *Algorithms and Data Structures Symposium*, Polytechnic Institute of New York University, Brooklyn (NY), USA, 15–17 August 2011
- [[12]] “Sorting under Partial Information (without the Ellipsoid Algorithm)”, with Jean Cardinal, Gwenaël Joret, Raphaël Jungers and Ian Munro, *42nd ACM Symposium on Theory of Computing (STOC 2010)*, Cambridge (MA), USA, 6–8 June 2010
- [[11]] “Hitting Diamonds and Growing Cacti”, with Gwenaël Joret and Ugo Pietropaoli, *14th conference on Integer Programming and Combinatorial Optimization (IPCO 2010)*, Lausanne, Switzerland, 9–11 June 2010
- [[10]] “The Stackelberg Minimum Spanning Tree Game on Planar and Bounded-Treewidth Graphs”, with Jean Cardinal, Erik D. Demaine, Gwenaël Joret, Ilan Newman and Oren Weimann, *5th Workshop on Internet & Network Economics (WINE’09)*, Rome, Italy, 14–18 December 2009
- [[9]] “A closest vector problem arising in radiation therapy planning”, with Céline Engelbeen and Antje Kiesel, *Japan Conference on Computational Geometry and Graphs*, Kanazawa, Japan, 11–13 November 2009
- [[8]] “Minimum Entropy Combinatorial Optimization Problems”, with Jean Cardinal and Gwenaël Joret, *Computability in Europe 2009 (CiE 2009)*, Heidelberg, Germany, 19–24 July 2009
- [[7]] “An efficient algorithm for partial order production”, with Jean Cardinal, Gwenaël Joret, Raphaël Jungers and Ian Munro, *41st ACM Symposium on Theory of Computing (STOC 2009)*, Bethesda (MD), USA, 31 May–2 June 2009
- [[6]] “The minimum spanning tree Stackelberg game”, with Jean Cardinal, Erik Demaine, Gwenaël Joret, Stefan Langerman, Ilan Newman and Oren Weimann, *Lecture Notes in Computer Science* 4619, pages 64–76, proceedings of the *10th Workshop on Algorithms and Data Structures (WADS 2007)*, Halifax (Nova Scotia), Canada, 15–17 August 2007
- [[5]] “Tight results on minimum entropy set cover”, with Jean Cardinal and Gwenaël Joret, *Lecture Notes in Computer Science* 4110, pages 61–69, proceedings of the *9th Intl. Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX 2006) – 10th Intl. Workshop on Randomization and Computation (RANDOM 2006)*, Barcelona, Spain, 28–30 August 2006
- [[4]] “Minimum entropy coloring”, with Jean Cardinal and Gwenaël Joret, *Lecture Notes in Computer Science* 3827, pages 819–828, proceedings of *Int. Symposium on Algorithms and Computation (ISAAC 2005)*, Sanya (Hainan), China, 19–21 December 2005
- [[3]] “Approximate min-max relations for odd cycles in planar graphs”, with Nadia Hardy, Bruce Reed and Adrian Vetta, *Lecture Notes in Computer Science* 3509, pages 35–50, proceedings of *11th conference on Integer Programming and Combinatorial Optimization (IPCO 2005)*, Berlin, Germany, 8–10 June 2005

- [[2]] “Planar graph bipartization in linear time”, with Nadia Hardy, Bruce Reed and Adrian Vetta, *Electronic Notes in Discrete Mathematics*, Vol. 19, pages 265–271, proceedings of *Graphs, Algorithm, Combinatorics (GRACO 2005)*, Angra dos Reis (Rio de Janeiro), Brazil, 27–29 April 2005
- [[1]] “On minimum entropy graph colorings”, with Jean Cardinal and Gilles Van Assche, *the IEEE International Symposium on Information Theory 2004 (ISIT 2004)*, Chicago (IL), USA, 27 June–2 July 2004 (1 page summary)

• **Other**

- {11} “Extended formulations for polygons”, with Thomas Rothvoß and Hans Raj Tiwary, *submitted*
- {10} “Optimal Algorithms For Segment Minimization With Small Maximal Value”, with Therese Biedl, Stephane Durocher, Céline Engelbeen and Maxwell Young, *submitted (journal version)*
- {9} “A note on the Cops & Robber game on graphs embedded in non-orientable surfaces”, with Nancy E. Clarke, Gwenaël Joret and Dirk O. Theis, *submitted*, <http://arxiv.org/abs/0803.0538>
- {8} “Sorting under Partial Information (without the Ellipsoid Algorithm)”, with Jean Cardinal, Gwenaël Joret, Raphaël Jungers and Ian Munro, *submitted (journal version)*, <http://arxiv.org/abs/0911.0086>
- {7} “Small minors in dense graphs”, with Gwenaël Joret, Dirk Oliver Theis and David Wood, *submitted*, <http://arxiv.org/abs/1005.0895>
- {6} “The Stackelberg Minimum Spanning Tree Game on Planar and Bounded-Treewidth Graphs”, with Jean Cardinal, Erik Demaine, Gwenaël Joret, Ilan Newman and Oren Weimann, *submitted (journal version)*, <http://arxiv.org/abs/0909.3221>
- {5} “Hitting Diamonds and Growing Cacti”, avec Gwenaël Joret et Ugo Pietropaoli, *submitted (journal version)*, <http://arxiv.org/abs/0911.4366>
- {4} “Minimum Entropy Combinatorial Optimization Problems”, with Jean Cardinal and Gwenaël Joret, *submitted (journal version)*
- {3} “The polyhedron of all representations of a semiorder”, with Barry Balof and Jean-Paul Doignon, *submitted*
- {2} K. Aardal, G. Nemhauser, R. Weismantel (Eds.), *Handbooks in Operations Research and Management Science*, Vol. 12, *Discrete Optimization*, Elsevier, Amsterdam, The Netherlands, 2006, ISBN: 0-444-51507-0, 607 pp., EUR 179, \$197. Book review published in *Operations Research Letters*, Vol. 35, pages 823–824, 2007
- {1} “A graph coloring problem with applications to data compression”, with Jean Cardinal et Gilles Van Assche, Technical Report 517, Computer Science Department, ULB, 2004, 15 pages

Research visits

Excluding post-doctoral stays:

- 2010/12/16–2010/12/24** Jochen Könemann, Waterloo University
(Waterloo, ON, Canada)
- 2010/10/27–2010/11/2** Michele Conforti, Università di Padova
(Padova, Italy)
- 2010/10/6–2010/10/6** Tony Huynh, CWI
(Amsterdam, The Netherlands)
- 2010/3/17–2010/3/20** Volker Kaibel, Universität Otto-von-Guericke Magdeburg
(Magdeburg, Germany)
- 2009/11/25–2009/11/27** Konrad Engel, Universität Rostock (Rostock, Germany)
- 2007/9/12–2007/9/23** Gianpaolo Oriolo, Università di Roma Tor Vergata (Rome, Italy)
- 2006/6/14–2006/7/1** Odile Marcotte, GERAD (HEC Montréal), and
Adrian Vetta, McGill (Montreal, Canada)
- 2000/3/31–2000/5/26** Michel X. Goemans, MIT (Boston, MA, USA)
- 20/3/2000–31/3/2000** Peter C. Fishburn, AT&T lab (Florham Park, NJ, USA)

Talks

Excluding seminar talks organized by own institution.

• Talks in conferences

24. “Hitting diamonds and growing cacti”, *14th Combinatorial Optimization Workshop*, 9–11 June 2010, Lausanne, Switzerland
23. “Sorting under partial information (without the ellipsoid algorithm)”, *Bellairs Workshop on Approximation Algorithms*, Holetown, 28 March–3 April 2010, Holetown, Barbados
22. “Hitting diamonds and growing cacti”, *14th Combinatorial Optimization Workshop*, 3–8 January 2010, Aussois, France
21. “An efficient algorithm for partial order production”, *41st ACM Symposium on the Theory of Computing*, 31 May–2 June 2009, Bethesda (MD), USA
20. “An efficient algorithm for partial order production”, *13th Combinatorial Optimization Workshop*, 11–17 January 2009, Aussois, France
19. “Semiorde representations through the geometric lens”, *Ordered structures in games and decision*, 18 November 2008, Paris, France (invited talk)
18. “Network flows in probabilistic choice theory”, *Ordinal and Symbolic Data Analysis 2007*, June 7–9, 2007, Ghent, Belgium (invited talk)
17. “Les mystères du polytope des ordres totaux”, *Journée Mathématiques Discrètes et Sciences Humaines*, June 1st, 2007, ENST, Paris, France (invited)
16. “Surfaces that Define Facets of the Linear Ordering Polytope”, *DIMACS Workshop on Polyhedral Combinatorics of Random Utility*, May 24–26, 2006, Piscataway (NJ), USA

15. “Minimum Entropy Coloring”, *Franco-Canadian Workshop on Combinatorial Algorithms*, August 18–20, 2005, Hamilton (Ontario), Canada
14. “Approximate min-max relations for odd cycles in planar graphs”, *11th conference on Integer Programming and Combinatorial Optimization (IPCO 2005)*, June 8–10, 2005, Berlin, Germany
13. “How to recycle your facets”, *Bertinoro Workshop on Combinatorial Optimization 2004*, May 1–6, 2004, Bertinoro, Italy
12. “Turning factor-critical graphs into facets of the linear ordering polytope”, *Ordinal and Symbolic Data Analysis 2003*, August 20–23, 2003, Irvine (CA), USA
11. “Nonadjacency on partial order polytopes is NP-complete”, *Combinatorial Optimization 2002*, April 8–10, 2002, Paris, France
10. “The facets and the symmetries of the approval-voting polytope”, *EIDMA Symposium 2001*, October 25–26, 2001, Oostende, Belgium
9. “Extendability of small cyclically ordered sets”, *EIDMA Symposium 2000*, October 12–13, 2000, Mierlo, The Netherlands
8. “Shaping a 0/1-polytope from the cube”, *Euroconference on Algorithmic and Discrete Mathematics*, August 19–25, 2000, Anogia (Crete), Greece
7. “Repercussions of Dimension Theory in Polyhedral Combinatorics”, *Ordinal and Symbolic Data Analysis 2000*, July 5–8, 2000, Brussels, Belgium
6. “Interpreting the facets of small order polytopes via sum and strengthen”, *Fourteenth Conference on Quantitative Methods for Decision Making (ORBEL 14)*, January 20–21, 2000, Mons, Belgium
5. “Adjacency on weak order polytopes”, *Orders, Algorithms and Applications '99*, August 25–27, 1999, Montpellier, France
4. “Automorphism groups of some order polytopes”, *European Chapter on Combinatorial Optimization XII*, May 27–29, 1999, Island of Bendor, France
3. “Combinatoire polyédrique des ordres totaux et partiels”, *Journée Ensembles Ordonnés, Treillis et Applications*, October 19, 1998, Paris, France (invited talk)
2. “Polyhedral aspects of partial orders and comparability graphs”, *Ordinal and Symbolic Data Analysis 98*, September 28–30, 1998, Amherst (MA), USA
1. “On the partial order polytope”, *Combinatorial Optimization 98*, April 15–17, 1998, Brussels, Belgium

• Invited talks

15. “Extended formulations, non-negative factorizations and randomized communication protocols”, 8 juin 2011, Séminaire de Combinatoire, Paris VI, France
14. “Extended formulations, non-negative factorizations and randomized communication protocols”, 6 mai 2011, ULG, Belgique

13. “Sorting under partial information (without the ellipsoid algorithm)”, Universität Otto-von-Guericke Magdeburg, March 18, 2010, Magdeburg, Germany
12. “Sorting under partial information (without the ellipsoid algorithm)”, Universität Rostock, November 26, 2009, Rostock, Germany
11. “An efficient algorithm for partial order production”, *Zentrum für Angewandte Informatik Kolloquium*, Universität zu Köln, May 22, 2009, Köln, Germany
10. “An efficient algorithm for partial order production”, *Combinatorial Geometry and Optimization Seminar*, Ecole Polytechnique Fédérale de Lausanne, May 14, 2009, Lausanne, Switzerland
9. “The Stackelberg minimum spanning tree game”, *IASI/CNR*, September 19, 2007, Rome, Italy
8. “The minimum spanning tree Stackelberg game”, *Universiteit Maastricht Business School*, April 21, 2007, Maastricht, The Netherlands
7. “Une relation de type min-max pour les transversaux de cycles dans les graphes séries-parallèles”, *Séminaire du GERAD*, GERAD, June 28, 2006, Montreal, Canada
6. “Minimum Entropy Coloring”, *Séminaire du GERAD*, GERAD, August 17, 2005, Montreal, Canada
5. “Packing and covering odd cycles in planar graphs”, *Optimization Seminar*, Advanced Optimization Laboratory (McMaster University), December 6, 2004, Hamilton (Ontario), Canada
4. “How to recycle your facets”, *Mathematical Programming Seminar*, CORE (UCL), April 27, 2004, Louvain-La-Neuve, Belgium
3. “Surfaces définissant des facettes du polytope des ordres totaux”, *Séminaire de Combinatoire et d’Informatique Mathématique*, Université du Québec à Montréal (UQaM), March 26, 2004, Montreal, Canada
2. “How to recycle your facets”, *Discrete Mathematics and Optimization Seminar*, McGill University, March 1st, 2004, Montreal, Canada
1. “Le polytope des ordres totaux : nouvelles inégalités”, *Séminaire Mathématiques Discrètes et Sciences Sociales*, January 12, 2004, *Centre d’Analyse et de Mathématique Sociales*, Paris, France

Scientific service

Associate Editor for Operations Research Letters

Has acted as referee for the following journals/volumes/conferences:

SODA 2010 • *IPCO 2010* • *WAOA 2010* • *ISCO 2010* • *JCT-A* • *Networks* • *TOP* • *Volume in honor of Peter Fishburn* • *4OR* • *Mathematical Programming B* • *Algorithmica* • *RAIRO - Operations Research* • *Linear Algebra and its Applications* • *Annals of Operations Research* • *European Journal of Operational Research* • *Discrete Optimization* • *Electronic Journal of Combinatorics* • *Operations Research Letters* • *Discrete Applied Mathematics* • *Journal of*

Mathematical Psychology • Discrete Mathematics • Central European Journal of Operations Research • Mathématiques et Sciences Humaines • Mathematics of Operations Research.

Has co-organized the following conferences/workshops

- *Second Cargese Workshop in Combinatorial Optimization* (on rounding techniques), with Gianpaolo Oriolo, Gautier Stauffer and Paolo Ventura, July 2011 http://www.math.u-bordeaux.fr/~gstauffer/Cargese_workshop/Overview.html
- *First Cargese Workshop in Combinatorial Optimization* (on extended formulations), with Gianpaolo Oriolo, Gautier Stauffer and Paolo Ventura, September 2010 http://www.math.u-bordeaux.fr/~gstauffer/Cargese_workshop_2010/Overview.html
- *Ordinal and Symbolic Data Analysis 2000*, with Jean-Paul Doignon and Marc PirLOT, July 2000.

Awards

2003 Fellow of the Belgian American Educational Foundation (BAEF)

2003 “Rayonnement International” Prize (ULB)

2000 Winner of the *concours des bourses de voyage de la Communauté française*

1997 Medal of the University (ULB)