

Curriculum vitae

Mireille Bousquet-Mélou

Employment

- Senior researcher (“directrice de recherche”) at CNRS
Department of Computer Science (LaBRI), Université de Bordeaux, France (2002–present)
- Junior researcher (“chargée de recherche”) at CNRS
Department of Computer Science (LaBRI), Université de Bordeaux, France (1990–2002)

Visiting appointments

- Schrödinger Institute, Vienna. Program *Combinatorics, Geometry, and Physics*. June 2014.
- Institute of Mathematics and Computer Science, Universität Leipzig. April – August 2013
- MSRI, Berkeley. Program *Random spatial processes*. January 2012
- Centre de Recerca Matemàtica, Barcelone. Program *Enumerative Combinatorics and Random Structures*. March – April 2007
- Mittag-Leffler Institute, Stockholm. Program *Algebraic Combinatorics*. March – May 2005
- University of Göteborg, Sweden. February 2004
- The University of Melbourne, Australia. (June – July 2002, October – November 1999, April 1998, September – November 1995 – December 2015)
- Université du Québec à Montréal, Canada. (April 1995, April 1994, September – November 1991)
- Mittag-Leffler Institute, Stockholm. Program *Combinatorics*. April – May 1992

Education

- Student at the École normale supérieure (Paris, rue d’Ulm) 1986–1990
- PhD, Université de Bordeaux, France (1991)
- Habilitation à diriger des recherches, Université de Bordeaux, France (1996)

Distinctions

- CNRS Silver medal for Mathematics, 2014
- Prize *Charles-Louis de Saulces de Freycinet* (a mathematics prize from the French Academy of Sciences), 2009
- Invited speaker at the International Congress of Mathematicians (Combinatorics session), 2006

- Honorary doctorate of the University of Linköping, Sweden, 2005
- CNRS bronze medal for computer science, 1993
- IBM prize for young researchers in Computer science, 1993
- Agrégation de mathématiques, rank 1, 1989

Editorial appointments

- Journal of Combinatorial Theory, Series A (2001–present)
- Advances in Applied Mathematics (2000–present)
- Séminaire lotharingien de combinatoire (2007–present)
- Annales de l’institut Poincaré D: Combinatorics, Physics and their Interactions (2013–)
- Electronic J. Combinatorics (2013–present)
- CRM short courses series (Centre de recherches en mathématiques, Montréal) (2016–)

Other appointments

- National committee for scientific research (“comité national de la recherche scientifique”) in mathematics (2016–)
- Scientific committee of the Mathematics Institute at CNRS (INSMI) (2010–2014)
- Scientific committee of the Fondation Sciences Mathématiques de Paris (2012–2015)

Organization of Programs and Conferences (selection)

- *Enumerative Combinatorics II*, Oberwolfach, 2018. With C. Krattenthaler, M. Drmota, M. Noy.
- *Algorithmic and Enumerative Combinatorics*, E. Schrödinger Institute, Vienna. With M. Drmota, C. Krattenthaler, P. Paule et M. Singer (October–November 2017).
- *Lattice walks at the Interface of Algebra, Analysis and Combinatorics*, BIRS, Banff, Canada, Septembre 2017 (with Marni Mishna, Steve Melczer, Michael Singer)
- *Enumerative Combinatorics*, Oberwolfach, March 2014. With C. Krattenthaler, M. Drmota, M. Noy.
- *Random spatial processes*, MSRI, Berkeley (Mathematical Sciences Research Institute), January–June 2012. With R. Kenyon, G. Lawler, A. Okunkov, Y. Peres.
(<http://www.msri.org/web/msri/scientific/programs/show/-/event/Pm140>)
- *Statistical physics, combinatorics and probability: from discrete to continuous models*, Henri Poincaré Institute, Paris, September–December 2009. With J. Bouttier, G. Miermont et G. Schaeffer.
(<http://www.ihp.jussieu.fr/ceb/Trimestres/T09-4/index.html>)
- *Combinatorics and Statistical Physics*, E. Schrödinger Institute, Vienna. With C. Krattenthaler, B. Nienhuis, M. Drmota (February–July 2008).
(<http://www.mat.univie.ac.at/users/kratt/public.html/esi/>)
- During the 2007 program *Recent progress in combinatorics*, (CRM, Montréal), I co-organized a winter school and a workshop. With T. Guttman, P. Leroux et A. Sokal.

- 54th *Séminaire lotharingien de Combinatoire*, for Xavier Viennot’s 60th birthday. Alsace, April 2005. With Christian Krattenthaler.
- Summer school of the European network ACE, *Combinatorics of groups and algebras*. CIRM, Luminy, July 2004 (two weeks)
- *Physics and Combinatorics*, CIRM, Luminy, March 1995

Program committees

- *FPSAC* 2016 (Vancouver), 2007 (Nankai), 2000 (Moscou), 1997 (Vienna)
- *EUROCOMB*, Bergen, Norway, 2015
- **AofA 2014 (Analysis of Algorithms), Paris. Co-chair of the program committee, with Michelle Soria**
- ***International Congress of Mathematicians 2014***: panel “Combinatorics”
- *SIAM Conference on Discrete Mathematics*, Minneapolis, 2014
- ***FPSAC 2011 (Formal power series and algebraic combinatorics)*, Reykjavik, Iceland. Co-chair of the program committee, with Michelle Wachs.**
- *CANT’2006* (International School and Conference on Combinatorics, Automata and Number Theory), Liège, Belgique.
- *4th Colloquium on Mathematics and Computer Science: Algorithms, Trees, Combinatorics and Probabilities*, 2006, Nancy, France.
- *Discrete Random Walks*, Paris, 2003.
- *STACS 2001 (Symposium on theoretical aspects of computer science)*, Dresden

PhD students

- Wenjie Fang (2013–2016). Joint supervision with Guillaume Chapuy, Université Paris 7.
- Julien Courtiel (2011–2014). PIMS post-doc in Vancouver, now post-doc in Paris.
- Axel Bacher (2008-2011). “Maître de conférences”, Université Paris Nord.
- Olivier Bernardi (2003–2006). Assistant professor, Brandeis University, Boston (on leave from CNRS)
- Yvan Le Borgne (2000–2004). CNRS, Bordeaux, France
- Andrew Rechnitzer (1998–2000). Associate professor, UBC, Vancouver, Canada.

Personal Born 12th May, 1967

One child (born 2009)

Contact information

Laboratoire Bordelais de Recherche en Informatique, UMR 5800
 Université de Bordeaux
 351 cours de la Libération, 33405 Talence Cedex, France
 Phone: 33 (0)5 56 84 69 06 (Fax: 33 (0)5 56 84 66 69)
 e-mail: bousquet@labri.fr
 Web: <http://www.labri.fr/perso/bousquet/>

Publications

1 Journals

Lattice walks

- [1] Plane lattice walks avoiding a quadrant, *J. Combin. Theory Ser. A* **144** (2016) 37-79. Special issue for the 50th anniversary of the journal. ArXiv:1511.02111.
- [2] An elementary solution for Gessel's walks in the quadrant *Adv. Math.* **303** (2016) 1171-1189. arxiv:1503.08573.
- [3] (with Alin Bostan, Manuel Kauers, Steve Melczer) On 3-dimensional lattice walks confined to the positive octant, *Annals of Comb.*, **20** no. 4 (2016) 661-704. ArXiv:1409.3669
- [4] (with N. Beaton, J. de Gier, H. Duminil-Copin and A. Guttmann) The critical fugacity for surface adsorption of self-avoiding walks on the honeycomb lattice is $1 + \sqrt{2}$, *Comm. Math. Phys.* **326** no. 3 (2014) 727-754. arXiv:1109.0358
- [5] On the importance sampling of self-avoiding walks
Combin. Probab. Comput., **23** no. 5 (2014) 725-748. ArXiv:1106.1876.
- [6] (with G. Chapuy and L.-F. Prévaille-Ratelle) The representation of the symmetric group on m -Tamari intervals, *Adv. Math.* **247** (2013) 309–342. Arxiv:1202.5925, 2012.
- [7] (with É. Fusy and L.-F. Prévaille-Ratelle) The number of intervals in the m -Tamari lattices, *Elec. J. Combinatorics* **18** no. 2 (2012) paper P31 ArXiv:1106.1498
- [8] (with A. Bacher) Weakly directed self-avoiding walks, *J. Combin. Theory Ser. A.* **118** no. 8, (2011) 2365–2391. ArXiv:1010.3200.
- [9] (with M. Mishna) Walks with small steps in the quarter plane.
Contemp. Math. **520** (2010) 1–40. ArXiv:0810.4387
- [10] Families of prudent self-avoiding walks, *J. Combin. Theory Ser. A.* **117** no. 3 (2010) 313–344. ArXiv:0804.4843.
- [11] (with Yann Ponty) Culminating paths, *Discrete Math. Theoret. Comput. Sci.* **10** no. 2 (2008) 125–152.
- [12] Discrete excursions, *Séminaire Lotharingien de combinatoire* **57** (2008), article B57d, 23 pages (électronique). ArXiv math.CO/0701171.
- [13] Three osculating walkers, math.CO/0504153. *Journal of Physics: Conference Series* **42** (2006) 35–46.
- [14] Walks in the quarter plane: Kreweras' algebraic model, *Ann. Appl. Proba.* **15** no. 2 (2005) 1451–1491.
- [15] (with Anthony Guttmann and Iwan Jensen) Self-avoiding walks crossing a square, cond-mat/0506341. *J. Phys. A: Math. Gen.* **38** (2005) 9159–9181.
- [16] (with Marko Petkovšek) Walks confined in a quadrant are not always D-finite, *Theoret. Comput. Sci.* **307** (2003) 257–276.
- [17] (with Gilles Schaeffer) Walks on the slit plane, *Probab. Theory Relat. Fields* **124** no. 3 (2002) 305–344.
- [18] Walks on the slit plane: new approaches, *Adv. in Applied Math.* **27** (2001) 243–288.

Graphs, maps and trees

- [19] (with Olivier Bernardi) The Potts model on planar maps: differential equations, to appear in *Comm. Math. Phys.* Arxiv:1507.02391
- [20] (with Julien Courtiel) Spanning forests in regular planar maps, *J. Combin. Theory Ser. A* **135** (2015) 1–59. ArXiv:1306.4536.
- [21] (with Markus Lohrey, Sebastian Maneth, Eric Noeth) XML Compression via directed acyclic graphs. *Theory of Computing Systems* **57** no. 4 (2015) 1322–1371. ArXiv:1309.5927.
- [22] (with Kerstin Weller) Asymptotic properties of some minor-closed classes of graphs *Combin. Probab. Comput.* **23** no. 5 (2014) 749–795. ArXiv:1303.3836.
- [23] (with Guillaume Chapuy) The vertical profile of embedded trees, *Elec. J. Combin* **19** no. 3 (2012) Paper P46. ArXiv:1203.4148.
- [24] (with Olivier Bernardi) Counting colored planar maps: algebraicity results. *J. Combin. Theory Ser. B.* **101** no. 5 (2011) 315–377. ArXiv:0909.1695
- [25] (with Svante Janson) The density of the ISE and local limit laws for embedded trees, math.PR/0509322. *Ann. Appl. Proba.* **16** no. 3 (2006) 1597–1632.
- [26] Limit laws for embedded trees. Applications to the integrated superbrownian excursion, math.CO/0501266. *Random Structures Algorithms.* **29**, no. 4 (2006) 475–523.
- [27] (with Gilles Schaeffer) Enumeration of planar constellations. *Adv. in Applied Math.* **24** (2000) 337–368.

Functional equations in combinatorics

- [28] (with Arnaud Jehanne) Polynomial equations with one catalytic variable, algebraic series and map enumeration, math.CO/0504018. *J. Combin. Theory Ser. B.* **96** (2006) 623–672.
- [29] (with Cyril Banderier, Alain Denise, Danièle Gardy, Dominique Gouyou-Beauchamps and Philippe Flajolet), Generating functions for generating trees, *Discrete Math.* **246** no. 1-3 (2002) 29–55.
- [30] (with Marko Petkovšek) Linear recurrences with constant coefficients: the multivariate case, *Discrete Math.* **225** (2000) 51–75.

Permutations and set partitions

- [31] (with Michael Albert) Permutations sortable by two stacks in parallel and quarter plane walks, *Europ. J. Combin.* **43** (2015) 131–164. ArXiv:1312.4487.
- [32] (with Andrei Asinowski, Gill Barequet, Toufik Mansour, Ron Pinter) Orders induced by segments in floorplan partitions and $(2 - 14 - 3, 3 - 41 - 2)$ -avoiding permutations. *Elec. J. Combin.* **20** no. 2 (2013) P35
- [33] Counting permutations with no long monotone subsequence via generating trees and the kernel method. *J. Alg. Combin.* **33** no. 4 (2011) 571–608. Arxiv:1006.0311.
- [34] (with N. Bonichon and É. Fusy) Baxter permutations and bipolar orientations. *Séminaire Lotharingien de Combinatoire* **61A** (2010) paper B61Ah, 19 pp. Arxiv:0805.4180.
- [35] The expected number of inversions after n adjacent transpositions. *Discrete Math. Theoret. Comput. Sci.* **12** no. 2 (2010) 65–88. ArXiv:0909.0103

- [36] (with Anders Claesson, Mark Dukes, Sergey Kitaev) : $(2+2)$ -free posets, ascent sequences and pattern avoiding permutations. *J. Combin. Theory Ser. A* **117** no. 7 (2010) 884–909. ArXiv:0806.0666
- [37] (with Steven Butler) Forest-like permutations, math.CO/0603617. *Annals of Combinatorics* **11** (2007) 335–354.
- [38] (with Guoce Xin) On partitions avoiding 3-crossings, math.CO/0506551. *Séminaire Lotharingien de Combinatoire*, vol. 54 (The Viennot Festschrift), paper B54e (21 pp.), 2005.
- [39] (with Einar Steingrímsson) Decreasing subsequences in permutations and Wilf equivalence for involutions, math.CO/0405334. *J. Alg. Combin.* **22**, no. 4 (2005) 383–409.
- [40] Four classes of pattern-avoiding permutations under one roof: generating trees with two labels, *Electronic J. Combinatorics* **9** no. 2 (2003) R19.
- [41] Sorted and/or sortable permutations, *Discrete Math.* **225** (2000) 25–50.
- [42] Multi-statistic enumeration of two-stack sortable permutations, *Electronic J. Combinatorics* **5** (1998) R21.

Integer partitions

- [43] (with Kimmo Eriksson) A refinement of the Lecture Hall Theorem, *J. Combin. Theory Ser. A.* **86** (1999) 63–84.
- [44] (with Kimmo Eriksson) Lecture Hall Partitions 2, *The Ramanujan Journal* **1** no. 2 (1997) 165–186.
- [45] (with Kimmo Eriksson) Lecture Hall Partitions, *The Ramanujan Journal* **1** no. 1 (1997) 101–111.

Directed animals

- [46] (with Andrew Rechnitzer) Lattice animals and heaps of dimers, *Discrete Math.* **258** (2002) 235–274.
- [47] New enumerative results on two-dimensional directed animals, *Discrete Math.* **180** (1998) 73–106.
- [48] (with Andrew Conway) Enumeration of directed animals on an infinite family of lattices, *J. Phys. A: Math. Gen.* **29** (1996) 3357–3365.

Convex polygons

- [49] (with Andrew Rechnitzer) The site-perimeter of bargraphs, *Adv. in Applied Math.* **31** (2003) 86–112.
- [50] (with Anthony Guttmann, William Orrick, Andrew Rechnitzer) Inversion relations, reciprocity and polyominoes, *Annals of Combinatorics* **3** no. 2–4 (1999) 223–249.
- [51] (with Anthony Guttmann) Enumeration of three-dimensional convex polygons, *Annals of Combinatorics* **1** (1997) 27–53.
- [52] (with Anthony Guttmann) Three-dimensional convex polygons, *Phys. Rev. E.* **55** (1997) R6323–6326.

- [53] A method for the enumeration of various classes of column-convex polygons, *Discrete Math.* **154** (1996) 1–25.
- [54] Percolation models and animals, *European J. Combin.* **17** (1996) 343–369.
- [55] (with Jean-Marc Fédou) The generating function of convex polyominoes : the resolution of a q -differential system, *Discrete Math.* **137** (1995) 53–75.
- [56] Polyominoes and polygons, in “Jerusalem Combinatorics ’93” (H. Barcelo, G. Kalai eds.), *Contemporary Mathematics* **178** (1994) 55–70.
- [57] Codage des polyominos convexes et équations pour l’énumération suivant l’aire, *Discrete Appl. Math.* **48** (1994) 21–43.
- [58] q -Énumération de polyominos convexes, *J. Combin. Theory Ser. A* **64** (1993) 265–288.
- [59] (with Xavier Viennot) Empilements de segments et q -énumération de polyominos convexes dirigés, *J. Combin. Theory Ser. A* **60** (1992) 196–224.
- [60] Une bijection entre les polyominos convexes dirigés et les mots de Dyck bilatères, *Inf. Th. et Appl.* **26** (1992) 205–219.
- [61] Convex polyominoes and heaps of segments, *J. Phys. A : Math. Gen.* **25** (1992) 1925–1934.
- [62] Convex polyominoes and algebraic languages, *J. Phys. A : Math. Gen.* **25** (1992) 1935–1944.

Other enumeration problems

- [63] (with James Propp and Julian West) Perfect matchings for the three-term Gale-Robinson sequences. *Elec. J. Combin.* **16** no. 1 (2009) Article R125. ArXiv:0906.3125
- [64] (with Svante Linusson and Eran Nevo) On the independence complex of square grids, *J. Alg. Combinatorics* **27** (2008) 423–450. ArXiv:math.CO/0701890.
- [65] (with Laurent Habsieger) Sur les matrices à signes alternants, *Discrete Math.* **139** (1995) 57–72.
- [66] (with François Bergeron and Serge Dulucq) Standard paths in the composition poset, *Ann. Sci. Math. Québec* **19** (1995) 139–151.

Combinatorics on words

- [67] (with Jean-Paul Allouche) On the conjectures of Rauzy and Shallit for infinite words. *Commentationes Math. Univ. Carolinae* **36** (1995) 705–712.
- [68] (with Jean-Paul Allouche) Canonical positions for the factors in the paperfolding sequences, *Theoret. Comput. Science* **129** (1994) 263–278.
- [69] (with Jean-Paul Allouche) Facteurs des suites de Rudin-Shapiro généralisées, Journées Montoises d’Informatique Théorique, *Bulletin of the Belgian Math. Society* **1** (1994) 145–164.
- [70] The number of minimal word chains computing the Thue-Morse word, *Inform. Process. Lett.* **44** (1992) 57–64.

2 Book chapter(s)

- [71] Counting planar maps, coloured or uncoloured. Invited paper for the *23rd British Combinatorial Conference*, 2011. *Surveys in Combinatorics 2011, London Math. Soc. Lecture Note Ser.* **392** (2011) 1–50. R. Chapman ed.
- [72] (with Richard Brak) Exactly solved models of polyominoes and polygons, Chapter 3 of *Polygons, Polyominoes and Polycubes*, Lecture Notes in Physics, Volume 775, pp. 43–78, Springer Berlin/Heidelberg 2009. Arxiv:0811.4415.

3 Submitted papers

1. (with Nicolas Bonichon, Paul Dorbec, Claire Pennarun) On the number of planar Eulerian orientations, ArXiv:1610.09837.
2. (with Riccardo Biagioli, Frédéric Jouhet and Philippe Nadeau) Length enumeration of fully commutative elements in finite and affine Coxeter groups, ArXiv:1612.07591.

4 Others

- [1] Invited editor for a special issue of *Algorithmica* devoted to a selection of papers presented at *Analysis of Algorithms 2014*. With Michèle Soria and Robert Sedgewick. **75** no. 4 (2016) 250 pp.
- [2] Invited editor of a special issue of *Math. Comput. Modelling* devoted to *Combinatorics and Physics*, **26** (1997). With Daniel Loeb.
- [3] Scientific report for the “habilitation à diriger des recherches”, report LaBRI 1154-96, 1996, 90 pp.
- [4] *q-Énumération de polyominos convexes*, PhD Thesis, Publications du LACIM, Université du Québec à Montréal, no. 9, 1991, 168 pp.

Conferences

1 Invited lectures (international meetings)

1. Bipolar orientations in planar maps, Random Trees and Maps: Probabilistic and Combinatorial Aspects, CIRM, Luminy, Juin 2016
2. Lattice walks and algebraic power series, *Conference dedicated to the scientific legacy of Marcel Paul Schützenberger*, Bordeaux, March 2016.
3. Lattice walks avoiding a quadrant, *Conference in honour of Tony Guttmann's 70th birthday*, Newcastle, Australia, December 2015.
4. The Potts model on planar maps, *ANZAMP meeting (Australian and New Zealand Association of Mathematical Physics)*, keynote speaker. Newcastle, Australia, December 2015.
5. The Potts model on planar maps, *Journées Itzykson*, CEA Saclay, June 2015
6. The Potts model on planar maps, *2D-Quantum Gravity and Statistical Mechanics*, Program “Combinatorics, Geometry and Physics”, Schrödinger Institute, Vienna, June 2014
7. Spanning forests in regular planar maps, *Workshop on Combinatorial Physics*, Cardiff, December 2013
8. Two-dimensional self-avoiding walks, *Autumn school ALEA in Europe*, October 2013
9. Two-dimensional self-avoiding walks, *FPSAC 2013 (Formal Power Series and Algebraic Combinatorics)*, Paris, June 2013
10. The critical fugacity for surface adsorption of self-avoiding walks on the honeycomb lattice is $1 + \sqrt{2}$, *Workshop on random polymers*, Eurandom, Eindhoven, The Netherlands, January 2013
11. Asymptotic properties of some minor-closed classes of graphs, *Winter Combinatorics Meeting*, Open University, Milton Keynes, England, January 2013.
12. Intervals in the m -Tamari lattices, *Aurora borealis combinatorics*, Abisko, Suède, December 2012.
13. Exactly solvable models of self-avoiding walks, Workshop *Connections for women*, Program *Random spatial processes* at MSRI, Berkeley, USA, January 2012.
14. Philippe Flajolet, founder of Analytic Combinatorics, *Lattice Models and Combinatorics*, MSRI, Berkeley, USA, January 2012.
15. Lattice paths everywhere, *Philippe Flajolet and Analytic Combinatorics* (Conference in the memory of Philippe Flajolet), Paris, December 2011.
16. Enumeration with catalytic parameters, Plenary speaker (3 lectures) at the 67th *Séminaire lotharingien de combinatoire*, Bertinoro, Italy, September 2011.
17. Counting planar maps, coloured or uncoloured, Plenary speaker at the *23rd British Combinatorial Conference*, Exeter, Great-Britain, July 2011.
18. The Potts model on planar maps, *Stochastic analysis*, Oberwolfach, Germany, May 2011.

19. The expected inversion number after n adjacent transpositions, *Aurora borealis combinatorics*, Abisko, Sweden, December 2010.
20. Sur les chemins auto-évitants, Plenary lecture at the *Journées MAS* (Modélisation Aléatoire et Statistique), Bordeaux, September 2010.
21. Prudent self-avoiding walks, *Conference for Philippe Flajolet's 60th birthday*. Paris, December 2008.
22. Prudent self-avoiding walks, *Meeting of the AMS (American Math Society)*, Vancouver, Canada, October 2008.
23. Counting permutations via generating trees, *6th Conference on permutation patterns*, Otago, New-Zealand, June 2008.
24. Counting coloured planar maps, *Topological and Geometric Graph Theory (TGGT)*, École Normale Supérieure, Paris, May 2008. *Electronic Notes in Discrete Mathematics* **31** (2008) 57–62.
25. Prudent self-avoiding walks, *Discrete Mathematics Biannual Meeting of Fachgruppe Diskrete Mathematik of Deutsche Mathematiker Vereinigung*, Marburg, May 2008.
26. The shape of binary trees, and applications to the integrated superbrownian excursion, *Northeast Probability Seminar*, City University of New York, November 2007.
27. Families of prudent self-avoiding walks, *Workshop on quantum random walks*, University of Pennsylvania, Philadelphia, November 2007.
28. Asymptotic enumeration and large random objects, Series of lectures at the winter school *Statistical Mechanics and Combinatorics*, Val-Morin, Canada, February 2007.
29. On the shape of binary trees, *Analysis of Algorithms*, Antibes, France, June 2007.
30. Rational and algebraic series in combinatorial enumeration, Combinatorics session, **International Congress of Mathematicians**, Madrid, August 2006. Proceedings of the ICM, Session lectures, pp. 789–826.
31. The Ising and hard-particle models on planar maps: a combinatorial solution, *2nd Workshop on Tutte polynomials and applications*, Centre de Recerca Matemàtica (CRM), Bellaterra, Spain, October 2005.
32. On the shape of binary trees, *EUROCOMB'05*, Berlin, September 2005.
33. Embedded trees, *Quantum Field Theory: Then and Now*, Conference in the memory of Claude Itzykson, CEA Saclay, Paris, June 2005.
34. Algebraic generating functions in enumerative combinatorics and context-free languages, *STACS 2005 (Symposium on theoretical aspects of computer science)*, Stuttgart, February 2005.
35. Are algebraic generating functions ordinary?, *24th Nordic and 1st Franco-Nordic Congress of Mathematicians*, Reykjavík, Iceland, January 2005.
36. Are algebraic generating functions ordinary?, *Third Colloquium on Mathematics and Computer Science Algorithms, Trees, Combinatorics and Probabilities*, Vienna, Austria, September 2004.
37. Planar maps and algebraic series: polynomial equations with one catalytic variable, Specialo edition of the *Séminaire Lotharingien* for Alain Lascoux's 60th birthday, Ottrott, March 2004.

38. *Summer school of the European Network of Algebraic Combinatorics*, Sweden, July 2003 (10 hours of lectures on Enumerative combinatorics).
39. Minimal transitive factorizations of permutations, *Recent Advances in Algebraic and Enumerative Combinatorics*, Banff, Canada, May 2003.
40. The Ising model on planar maps: a combinatorial solution, *Statistical Mechanics of Polymer Models*, Banff, Canada, May 2003.
41. The Ising model on planar maps: a combinatorial solution, 50th *Séminaire Lotharingien de Combinatoire*, Ottrott, March 2003.
42. Walks in the quarter plane: a functional equation approach, *Meeting of the Canadian Mathematical Society*, Québec, Canada, June 2002.
43. Linear recurrence relations with constant coefficients: the multivariate case, *Meeting of the American Mathematical Society*, Columbus, USA, September 2001.
44. The site-perimeter of bargraphs, *Meeting of the Canadian Mathematical Society*, Saskatoon, Canada, June 2001.
45. On (some) functional equations arising in enumerative combinatorics, *FPSAC 2001*, Tempe, USA, May 2001
46. Counting paths on the slit plane, *Classical Combinatorics: an international conference*, conference in honor of Dominique Foata, Philadelphia, USA, July 2000.
47. Counting paths on the slit plane, *Self-interacting random processes*, Oberwolfach, Germany, May 2000.
48. Two lectures at the meeting *Mathematical physics of polymers and percolation*, The Fields Institute, Toronto, August 1998.
49. Lecture hall partitions, *Combinatorics: algebraic, geometric and probabilistic aspects*, San Feliu de Guixols, Spain, September 1997.
50. Polyominoes and polygons, *Jerusalem Combinatorics 93*, Israel, May 1993.

2 Proceedings of international conferences with program committees

- [1] (with Olivier Bernardi et Kilian Raschel), Counting quadrant walks via Tutte’s invariant method, talk at FPSAC 2016, Vancouver. *DMTCS Proceedings* (2016).
- [2] (with Michael Albert) Permutations sortable by two stacks in parallel and quarter plane walks, FPSAC 2014, Chicago. *DMTCS Proceedings* (2014) pp. 585-596.
- [3] (with Julien Courtiel) Spanning forests in regular planar maps, *FPSAC 13* (Formal power series and algebraic combinatorics), Paris, June 2013. *DMTCS Proceedings* (2013) pp. 241–252.
- [4] (with Kerstin Weller) Asymptotic properties of some minor-closed classes of graphs, *FPSAC 13*, Paris, June 2013. *DMTCS Proceedings* (2013) pp. 599–610.
- [5] (with Guillaume Chapuy and Louis-François Prévaille-Ratelle) The representation of the symmetric group on m -Tamari intervals, *FPSAC 2012*, Nagoya, Japan, August 2012. *DMTCS Proceedings* (2012) pp. 351–364.

- [6] Counting planar maps, coloured or uncoloured. Invited paper for the *23rd British Combinatorial Conference*, July 2011. *Surveys in Combinatorics 2011, London Math. Soc. Lecture Note Ser.* **392** (2011) 1–50. R. Chapman ed.
- [7] (with A. Bacher) Weakly directed self-avoiding walks, *FPSAC 10*, San Francisco, USA, August 2010. *DMTCS Proceedings* (2010) pp. 473–484.
- [8] (with A. Claesson, M. Dukes et S. Kitaev) (2+2)-Free posets, ascent sequences and pattern avoiding permutations, *FPSAC 09*, Hagenberg, Austria, July 2009. *DMTCS Proceedings* (2009) pp. 217–228.
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