CURRICULUM VITAE

David Avis

30 January 2018

Present Address:

Graduate School of Informatics
Kyoto University
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Date of Birth: March 20, 1951

Citizenship: Canadian and British

Languages: English, French, Japanese

Education

Institution	*Degree*	*Field*	*Year*
Stanford University	Ph. D	Operations Research	1977
Stanford University	M.S.	Statistics	1975
University of Waterloo	B. Math	Combinatorics and Optimization	1973

Academic Experience

Position	*Dates*	*Location*
Researcher	2016.4 - present	Graduate School of Informatics, Kyoto University
Visiting Professor	2010.1 - 2016.3	Graduate School of Informatics, Kyoto University
Professor Emeritus	2015.1 - present	School of Computer Science, McGill University
Professor	1987.6 - 2014.12	School of Computer Science, McGill University
Associate Professor	1981.6 - 1987.5	School of Computer Science, McGill University
Assistant Professor	1977.9 - 1981.5	School of Computer Science, McGill University
J.S.P.S. Senior Fellow	2008.12 - 2009.1	Keio University
Visiting Professor	2006.1 - 2006.3	Kyoto University
J.S.P.S. Senior Fellow	2004.12 - 2005.6	Kyoto University
Visiting Researcher	2000.12	ERATO Quantum Computing Project, Tokyo
Visiting Professor	2000.1 - 2000.8	Kyoto University
Adjoint Professor	1995.8 - 1999.7	University of Tokyo
Visiting Researcher	1998.1 - 1998.4	IASI, CNR Rome
Visiting Professor	1991.1 - 1991.4	University of West Indies, Jamaica
Visiting Professor	1990.4 - 1990.8	Kyushu University
Visiting Professor	1990.8 - 1990.12	Tokyo Institute of Technology
Visiting Professor	1988.6 - 1988.7	University of Tokyo
J.S.P.S. Senior Fellow	1983.9 - 1983.12	University of Tokyo
C.O.R.E. Fellow	1978.5 - 1978.7	C.O.R.E., Université de Louvain, Belgium

Research Grants (1989 - present)

Date	*Agency*	*Type*	*$/Year*	*Co-investigators*
16-21	JSPS	Operating	3,000,000 yen (approx.)	C. Jordan
11-16	JSPS	Operating	3,000,000 yen (approx.)	
12-17	JSPS	Team	4,300,000 yen (approx.)	Amano, Ueno
09-13	NSERC	Operating	38,500	
08-11	MDEIE	International	35,000	INTRIQ-ERATO/SORST collaboration
04-09	NSERC	Operating	52,500	
05-08	FQRNT	Team	70,000	
99-04	NSERC	Operating	52,500	
01-04	FCAR	Team	61,000	Devroye, Toussaint, Whitesides
98-01	FCAR	Team	56,000	Devroye, Toussaint, Whitesides
95-99	NSERC	Operating	47,500	
95-98	FCAR	Team	56,000	Devroye, Toussaint, Whitesides
97-98	CRIM	Operating	3,750	
92-95	NSERC	Operating	44,000	-
92-95	FCAR	Team	68,400	El Gindy, Devroye, Toussaint, Whitesides
92	NSERC	Bilateral	10,000	
89-92	FCAR	Team	83,000	El Gindy, Devroye, Toussaint
89-92	NSERC	Infrastructure	84,000	School of Computer Science
89-92	NSERC	Operating	38,500	-

Awards and Fellowships

1. McGill-Japan Visiting Scholar Award (for visit of Dr. Yoshiaki Oda)

Professional Activities

1. Member of Editorial Boards of:

   Discrete Applied Mathematics.

   Computational Geometry: Theory and Applications.

   Graphs and Combinatorics.

   Discrete and Computational Geometry.

2. Advisory Member of the IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences published by The Institute of Electronics, Information and Communication Engineers of Japan (1994-2002).

3. Member of selection committee for the Japan Science and Technology Fund (Academic Section) administered by the N.S.E.R.C., from January 1994.

4. Referee for numerous Journals including:
Advances in Computing Research, Algorithmica, Annals of Discrete Mathematics, American Math Monthly, Australasian Journal of Combinatorics, Communications of the ACM, Discrete Applied Mathematics, Discrete Mathematics, Discrete and Computational Geometry, European Journal of Combinatorics, Graphs and Combinatorics, IEEE Transactions on Computers, IEEE Transactions on Information Theory, Information Processing Letters, Information Sciences, Journal of Classification, Journal of Fire Prevention Engineering, Journal of Graph Theory, Journal of Combinatorial Theory B, Journal of the ACM, Journal of Computers and Systems Sciences, Journal of Optimization Theory and Applications, Journal of Symbolic Computation, Mathematical Programming, Networks, Neural Networks, SIAM Journal of Computing, The Visual Computer, Transactions on Mathematical Software.

5. Member of Grant Selection Committee for N.S.E.R.C. Operating grants (1987/90) and the Province of Québec F.C.A.R. team research grants (1981/83).

6. Reviewer for Canada Council, Mathematical Reviews, N.S.E.R.C., N.S.F, City College Summer Bursaries.

7. External evaluator for tenure decisions at University of Newcastle, Carleton University, Simon Fraser University, University of California(Berkeley), and University of Saskatchewan.

8. Program Committee chairman, 8th ACM Symposium on Computational Geometry, Berlin, 1992. Program Committee member, 6th ACM Symposium on Computational Geometry, Urbana, 1990.

9. Co-organizer of the First Canadian Conference on Computational Geometry, McGill University, 1989.

10. Program Committee member, 3rd Annual International Symposium on Algorithms and Computation, Nagoya 1992.

11. External evaluator for PhD. theses at Rutger's University and University of Waterloo.

12. Guest Editor of Discrete and Computational Geometry, Volume 10, No. 2, 1993 based on ACM Symposium on Computational Geometry, Berlin 1991.

13. Guest Editor of Discrete Applied Mathematics, Volume 31, No. 2, 1991 based on First Candian Conference on Computational Geometry, Montreal 1989.

14. Co-editor with P. Bose of Snapshots of Computational and Discrete Geometry, Volume 3, School of Computer Science, McGill University.

15. Program Committee, CCCG '97, Kingston ON, August 1997.

16. Co-organizer (with E. Goodman and R. Pollack) of 924th AMS meeting, Montreal, Sept. 26-28 1997.

17. Session Chair, ISMP'97, Lausanne, August 1997.

18. Session Chair, Journées de geometrie algorithmique, Sophia-Antipolis, May 1998.

19. Co-organizer (with V. Klee and P. Gritzmann) of Oberwolfach meeting on Computational Convexity, February 1999.

20. Co-organizer (with T. Biedl, L. Devroye, S. Lezard, G. Toussaint, S. Whitesides) of 10th Canadian Conference on Computational Geometry, McGill, August 1998.

21. Program Committee, COCOON'2000, Sydney, Australia, July 2000.

22. Program Committee, Japanese Conference on Discrete and Computational Geometry, Tokyo, November 2000, December 2002.

23. Program Committee, 20th ACM Symposium on Computational Geometry, May 2004.

24. Co-organizer (with B. Reed) of Colloquium on Applied Optimization, GERAD-HEC, Montreal, October 15, 2004.

25. Co-organizer (with A. Deza) of Polyhedral Computation I-III, 3 sessions in Journées de l'optimisation, 2005, GERAD, Montreal, May 9-11, 2005.

26. Program Committee, Franco-Canadian Workshop on Combinatorial Algorithms, McMaster University, August 2005.

27. Co-organizer (with D. Bremner and Antoine Deza) of Workshop on Polyhedral Computation, CRM, Montréal, October 2006.

28. Program Committee Co-Chair, Computational Geometry and Graph Theory, Kyoto University, June 2007.

29. Program Committee Co-Chair, ICQNM 2008, Martinique, February 2008.

30. Program Committee, CanaDAM 2009, Montreal, May 2009.

31. Program Committee, IPCO 2010, Lausanne, June 2010.

32. Program Committee, XIV Spanish Meeting on Computational Geometry, Alcala de Henares, June 2011.

Industrial Experience

Position	*Dates*	*Location*
Consultant	2.94 - 4.94	Montréal
Consultant	8.83 - 9.83	Montréal
Consultant	1.75 - 3.76	Palo Alto CA and Fairbanks, Alaska
Programmer Analyst	1.69 - 5.73	Six four month work terms in industry

Conferences where papers were presented

Discrete Geometry and Optimization, Fields' Institute, Toronto, September 2011.

AAAC 2011, Taiwan, April 2011.

Efficiency of the Simplex Method, IPAM, UCLA, Los Angeles, January 2011.

Discrete and Computational Geometry, Bernoulli Institute, EPFL, September 2010.

Erdos Lecturer, Canadian Conference on Computational Geometry, Winnipeg, August 2010.

Canada-Japan Workshop on Discrete and Comptutaional Geometry, Tokyo, June 2009.

International Conference on Quantum, Nano and Micro Technologies (ICQNM), Martinique, January 2008.

International Workshop on Combinatorics, Yokohama, June 2007.

International Conference on Quantum, Nano and Micro Technologies (ICQNM), Guadeloupe, January 2007

Conference on Applications of Computer Algebra (ACA 2005) Nara, Japan, August 2005 (paper presented by Rudy Raymond)

Workshop on Enumeration Algorithms, Gunma University, March 2005.

High Performance Algorithms and Software for Nonlinear Optimization, HSPNO 2004, Ischia, Italy, June 2004.

Computers and Discovery, invited speaker, DIMACS-GERAD workshop, June 2004.

3rd Discrete Math Day, invited speaker, Carleton University, April 2004.

Journées d'optimisation", conférence magistral, Montreal, May 2003.

Third Japan Conference on Discrete and Computational Geometry, invited speaker, Tokai University, Tokyo, December 2002.

New Trends in Optimization (NTOC '01), Kyoto, Japan, December 2001.

Max Clique '01, University of Klagenfurt, Austria, May 2001 (presented by C. de Simone)

4th Latin American Symposium on Theoretical Informatics, Punta del Este, Uruguay, April 2000. (presented by C. de Simone)

3rd SPA Workshop, Komatsu, Japan, May 2000.

Kansai Operations Research Regional Meeting, Kyoto University, January 2000, invited speaker.

Workshop on Geometry and Software, ETH Zurich, April 1999, invited speaker.

First Japan Conference on Discrete and Computational Geometry, invited speaker, Tokai University, Tokyo, December 1998.

3rd SMM-AMS Meeting, Oaxaca, December 1997.

ISMP'97, Lausanne, August 1997, invited speaker

8th CCCCG, Ottawa, August 1996, joint paper presented by M. Kong.

ACM Special Meeting on Discrete and Computational Geometry, Mount Hollyoke, Mass., July 1996, invited speaker.

2nd SPA Workshop, Dogashima, Japan, May 1995, co-organizer (with H. Imai).

24th Computational Geometry Day, Courant Institute, New York, October 1994, invited speaker.

Workshop on Discrete and Computational Geometry, Hungarian Academy of Science, Budapest, June 1994, invited speaker.

892nd meeting of American Mathematical Society, Brooklyn N.Y., April 1994, invited speaker.

Workshop on Polyhedra, Kyoto University, May 1993, opening speaker.

Computational Geometry Day, Courant Institute, New York, 1992, invited speaker.

Colloque des Sciences Mathématiques du Québec, Montréal, October 1991, invited speaker.

Third Canadian Conference of Computational Geometry, Vancouver, August 1991, plenary speaker.

7th ACM Symposium on Computational Geometry, North Conway NH, June 1991.

1st and 5th Tokyo Algorithms Day, Tokyo, May 1991, October 1990, invited speaker.

The 2nd Japan Conference on Graph Theory and Applications, Hakone, August 1990, invited speaker.

First SIGAL Conference, Tokyo, August 1990.

First Canadian Conference of Computational Geometry, Montreal, August 1989.

Journées d'Optimisation, Université de Montreal, May 1989, invited participant.

Mathematical Programming Symposium, Tokyo, August 1988, invited participant.

13th IFIP Conference on System Modelling and Optimization, Tokyo, August 1987, invited participant.

Workshop in Computational Combinatorics, Vancouver, July-August 1987, invited participant.

3rd ACM Symposium on Computational Geometry, Waterloo, Ontario, June 1987.

Algorithms and Combinatorial Geometry, Mathematisches Forschungsinstitut Oberwolfach, Freiburg, West Germany, February 1987, invited participant.

2nd Computational Geometry Day, Courant Institute, New York, 1987, invited speaker.

AMS-IMS-SIAM Summer Research Conference on Discrete and Computational Geometry, Santa Cruz CA, July 1986, invited participant.

3 ème Colloque International Théorie des Graphes et Combinatoire, Marseille-Luminy, June 1986, invited speaker.

The 1st Japan Conference on Graph Theory and Applications, Hakone, June 1986, invited speaker.

2nd ACM Symposium on Computational Geometry, Yorktown Heights NY, June 1986.

1st ACM Symposium on Computational Geometry, Baltimore MD., June 1985.

International Conference on Foundations of Data Organization, Kyoto, Japan, May 1985.

IEEE Conference on Information Science, St. Jovite, Québec, September 1983.

Workshop on Computational Geometry, University of Illinois, invited paper, October 1982.

AMS Summer Meeting, Toronto, invited paper, August 1982.

2nd Franco-Southeast Asian Mathematics Conference, Quezon City, Philippines, May 1982.

Summer Graph Theory Symposium, Hakone, Japan, invited paper, May 1982.

Symposium on Matching Theory, National Bureau of Standards, invited paper, October, 1981.

International Mathematics Conference, National University of Singapore, Singapore, May 1981.

87th Annual ACM Meeting, San Francisco CA, invited paper, January 1981.

18th Allerton Conference, Urbana IL, October 1980.

Franco-Canadian Combinatorial Colloquium, Montréal, August 1979.

ISCAS Meeting, Tokyo, July 1979.

Summer Japanese Graph Theory Symposium, Nikko, Japan, July 1979.

9th S.E. Conference on Combinatorics, Graph Theory and Computing, Boca Raton FL,February 1978.

Invited Lectures

University of Tokyo, December 2010, December 1998(4 lectures), January 1997, August 1996, November 1995, April 1995, December 1994, April 1994, July 1993, May 1992, July 1988, November 1983, May 1982, June 1980.

Tohoku University, December 2010, April 2006, March 2005, July 2000.

Tokyo Science University, June 2010.

ERATO, Tokyo, December 2009, April 2006.

Mini-school on Computational Geometry, Kyoto, March 2006 (2 lectures).

KIDS, Kyoto University, January 2006.

Operations Society of Japan, Kyoto, January 2006.

National Institute of Informatics, Tokyo, March 2005.

University of San Marcos, November 2004.

ERATO Quantum Computing and Information, December 2003.

Kyoto University, Kyoto, December 2003, June 2001, April 1988, March 1984.

IASI-CNR Rome, June 2003, April 1998.

University of West Indies, Kingston, Jamaica, February 2003, February 2001, March 1991 (2 lectures).

Tokyo Institute of Technology, December 2002, July 1993, October 1990 (2 lectures), July 1988, June 1983, May 1982.

C.O.R.E., Université de Louvain, Belgium, May 2002.

Technical University of Berlin, May 2002.

University of Technology, Kingston, Jamaica, February 2002, February 1999, March 1997.

Universitat Politecnica de Catalunya, May 2001.

GERAD, Montreal, March 2001

Electro-Communications University, Tokyo, May 2000.

EPFL Lausanne, April 1999(5 lectures), April 1998(5 lectures).

ETH Zurich, April 1998.

University of Rome, La Sapienza, February 1998.

University of Tokyo January 1998(two lectures).

TRL-IBM Japan, January 1998.

Simon Fraser University, October 1996.

IBM Japan, Yokohama, August 1996.

Niigata University, March 1996.

Tsukuba University, April 1994, May 1993, May 1992(3 lectures).

Keio University, July 1993.

University of Hong Kong, June 1993.

Chuo University, June 1993 (3 lectures).

Osaka Electro-Communications University, April 1993.

Dalhousie University, October 1992.

Cornell University, Ithaca NY, November 1991.

Queen's University, Kingston Ont., November 1991, December 1980.

Fujitsu Research Labs, Kawasaki, October 1990.

Tokai University, Hiratsuka, Japan, October 1990, June 1980, June 1979.

Kyushu University, Fukuoka, June 1990, April 1989, May 1988

Université du Québec á Montréal, March 1990.
Case Western Reserve University, Cleveland, February 1990.
Hitachi Central Research Laboratories, Kokubunji, April 1989.
Courant Institute, New York University, March 1989, December 1985.
Bell Core, NJ, February 1987.
City College, NY, April 1986.
Princeton University, December 1985.
Carleton University, Ottawa, November 1985.

Short Courses Given

Institution	*Title*	*Date*
Kyoto University	Algorithms for High Dimensional Computational Geometry	April-June 2005
Kyoto University	Discrete and Computational Geometry	April-July 2000
Kyoto University	Advanced Algorithms	April-July 2000
E.P.F.L.	Metric and Cut Polyhedras	April 1999
E.P.F.L.	Pivot Methods for Convex Hulls	April 1998
University of Tokyo	Cryptography	April 1997
University of Tokyo	Generating Discrete Objects	May 1996
Keio University	Discrete and Computational Geometry	December 1994
University of Tokyo	Discrete and Computational Geometry	October 1990

Teaching at McGill

COMP 100 Introduction to Computing
COMP 203 Introduction to Computing - II
COMP 250 Introduction to Computer Science
COMP 315 Data Structures
COMP 360 Algorithm Design Techniques
COMP 506 Advanced Analysis of Algorithms
COMP 507 Computational Geometry (New Course)
COMP 566 Computer Methods in Operations Research
COMP 567 Integer Programming (New Course)
COMP 610 Information Structures - 1
COMP 611 Information Structures - 2
COMP 647 Cryptography and Data Security (New Course)
COMP 650 Combinatorial Algorithms - 1 (New Course)
COMP 651 Combinatorial Algorithms - 2 (New Course)
COMP 762 Topics in VLSI (New Course)
Note: Courses numbered COMP 500 and higher are graduate courses.

Postdoctoral Fellows

Mark Wilde, Sep 2009 - present, Quantum Information
Stephan Langerman, Sep 2001- Dec 2002, Geometric Search.
Tom Fevens, May-Dec 2000, Convex Subsets.
Sylvain Lezard, Nov-Dec 1998, Geometric Computation.

Graduate Student Supervision

Name	*Degree*	*Title*	*Date Graduated*
Y. Furukawa	MSc.	Hardness Results for History Based Pivot Rules	2015
D. Paku	MSc.	Nash Equilibria for Undirected Web Graphs	2015
C. Meagher	Phd.	Directed Max Cut with Mining Applications	2011
T. Deering	MSc.	History Based Pivot Rules for USOs	2010
T. Imamura	PhD.	Vertex and Set Covering	2007
B. Kaluzny	PhD.	Pivoting on Polyhedra and Arrangements	2005
	MSc.	Finite Pivot Algorithms and Feasibility	2001
D. MacDonald	PhD.	Surface Matching in 3-Dimensional Images	1998
D. Bremner	PhD.	On the Complexity of Vertex and Facet Enumeration	1997
N. Qi	PhD.	Register Allocation for Optimal Loop Scheduling	1993
P. Egyed	PhD.	Line Transveral Algorithms in the Plane	1992
	MSc.	Hidden-surface Removal in Polyhedral Cross-sections	1987
J-M. Robert	PhD.	Linear Approximation and Line Transversals	1991
L. Laforge	PhD.	Fault Tolerant Arrays	1991
T. Shermer	PhD.	Visibility and Art Gallery Theorems	1989
R. Wenger	PhD.	Stabbing and Separation	1988
D. Rappaport	PhD.	Complexity of Computing Simple Circuits in the Plane	1986
	MSc.	Visibility in Restricted Classes of Polyhedra	1982
H. ElGindy	PhD.	Hierarchical Decomposition of Polygons with Applications	1985
R. Bitar	MSc.	Feasibility algorithms for linear programming	2005
A. Guérette	MSc.	Projections of Penatagon Inequalities	2004
J. Umemoto	MSc.	Linear Programming Relaxations for Max Cut	2002
G. Jabbour	MSc.	Tool for Real-Time Conscious Design of Distributed Systems	2000
T. Nkgau	MSc.	Elliptic Curve Cryptography	1998
J.F. Yeung	MSc.	Undeniable Signatures	1998
K. Tse	MSc.	Survey of Internet Security Protocols	1997
M. Branchaud	MSc.	A Survey of Public Key Infrastructures	1997
V.K. Ho	MSc.	Performance Modelling of Terabit Optical Backplane	1997
M. Saeki	MSc.	Cryptography and Number Theory	1997
M. Kong	MSc.	Generating Rooted Triangulations with Minimum Degree Four	1996
C. Trouiller	MSc.	Production Scheduling with Lead Times	1995
D. Simmonds	MSc.A	Computer Aided Learning in Recursive Algorithms	1995
A. Leblanc	MSc.	Robot Location	1990
J. Caron	MSc.A	Partitioning Point Sets	1990
G. Pesant	MSc.	Geometric Covering	1989
L. Boyd-Wilson	MSc.A	Manipulating 3-d Polyhedra	1989
P. Yamamoto	MSc.	Vertical and Orthogonal L1 Linear Approximation	1988
G. Gao	MSc.	Motion Planning Arround Disks	1988

The following students were co-supervised:
Nkgau's Phd with K. Fukuda (Mcgill, Computer Science)
Ho with T. Szymanski(McGill, Elec. Eng.)
Qi with G. Gao (McGill, Computer Science)
MacDonald with A. Evans (Montreal Neurological Institute)
Saeki and Yeung with C. Crepeau (U. de Montréal, IRO)
Trouiller with J-L Goffin (McGill, Management)
Jabbour with M. Saksena (Concordia, CS)

List of Publications

Most publications since 1986 available on-line at: *http://cgm.cs.mcgill.ca/˜avis/*

Refereed Journal Papers

1. D. Avis and C. Jordan, "mplrs: A Scalable Parallel Vertex/Facet enumeration Code," *Math. Prog. Computation (online)* (2017).

2. D. Avis and O. Friedmann, "An Exponential Lower Bound for Cunningham's Rule," *Math. Prog. B* **161**, pp. 271-305 (2017).
3. D. Avis and H. Tiwary, "Compact Linear Programs for 2SAT," *European J. of Combinatorics* (2017(accepted)).
4. D. Avis and H. Tiwary, "On the H-free Extension Complexity of the TSP," *Optimization Letters,* pp. 445-455 (2017).
5. D. Avis and C. Meagher, "On the Directed Cut Cone and Polytope," *J. Combinatorial Optimization* **31**, pp. 1685-1708 (2016).
6. D. Avis and H. Tiwary, "A Generalization of Extension Complexity that Captures P," *Information Proc. Letters,* pp. 6-8 (2015).
7. R. Dimitrakopoulos, C. Meagher, and D. Avis, "Optimized Open Pit Mine Design, Pushbacks and the Gap Problem - A Review," *Journal of Mining Science* **50**, pp. 508-526 (2014).
8. D. Avis and H. Tiwary, "On the Extension Complexity of Combinatorial Polytopes," *Mathematical Programming B* (2014).
9. M. Cuturi and D. Avis, "Ground Metric Learning," *Journal of Machine Learning Research* **15**, pp. 533-64 (2014).
10. D. Avis, K. Iwama, and D. Paku, "Reputation Games for Undirected Graphs," *Discrete Applied Mathematics* **166**, pp. 1-13 (2014).
11. D. Avis, H. Miyata, and S. Moriyama, "Families of Polytopal Digraphs that do not Satisfy the Shelling Property," *Comput. Geom.* **46**, pp. 382-93 (2013).
12. D. Aoshima, D. Avis, T. Deering, Y. Matsumoto, and S. Moriyama, "On the Existence of Hamiltonian Paths for History Based Pivot Rules on Acyclic Unique Sink Orientations of Hypercubes," *Discrete Applied Mathematics* **160**, pp. 2104-15 (2012).
13. D. Avis, P. Hayden, and M. Wilde, "Leggett-Garg Inequalities and the Geometry of the Cut Polytope," *Physical Review A* **82** (2010). 030102(R).
14. D. Avis, S. Moriyama, and M. Owari, "From Bell Inequalities to Tsirelson's Theorem," *Proc. IECIE* **E92-A**, pp. 1254-67 (2009).
15. M. Ohsaki, N. Katoh, T. Kinoshita, S. Tanigawa, D. Avis, and I. Streinu, "Enumeration of Optimal Pin Jointed Bistable Compliant Mechanisms with Non-Crossing Members," *J. of Structural and Multidisciplinary Optimization* **37**, pp. 645-665 (2009).
16. D. Avis, P. Hayden, and I. Savov, "Distributed Compression and Multiparty Squashed Entanglement," *Journal of Physics A* **41** (2008 (24 pages)).
17. D. Avis, H. Imai, and T. Ito, "Generating Facets of the Cut Polytope by Triangular Elimination," *Mathematical Programming* **112**, pp. 303-25 (2008).
18. D. Avis, N. Katoh, M. Ohsaki, I. Streinu, and S. Tanigawa, "Enumerating Constrained Non-crossing Minimally Rigid Frameworks," *Discrete and Computational Geometry* **40(1)**, pp. 31-46 (2008).
19. D. Avis and B. Kaluzny, "Computing Disjoint Paths on Polytopes," *Journal of Combinatorial Optimization* (April 2008, online). 23 pages.
20. D. Avis, B. Kaluzny, and D. Titley-Peloquin, "Visualizing and Constructing Cycles in the Simplex Method," *Operations Research* **56**, pp. 512-518 (2008).
21. D. Avis, J. Bondy, W. Cook, and B. Reed, "Vasek Chvátal: A Short Introduction," *Graphs and Combinatorics* **23**, pp. 41-66 (2007).
22. D. Avis, N. Katoh, M. Ohsaki, I. Streinu, and S. Tanigawa, "Enumerating Planar Minimally Rigid Graphs," *Graphs and Combinatorics* **23**, pp. 117-34 (2007).
23. D. Avis and T. Imamura, "A List Heuristic for Vertex Cover," *Operations Research Letters* **35**, pp. 201-4 (2007).
24. D. Avis and T. Ito, "New Classes of Facets of the Cut Polytope and Tightness of the I_mm22 Bell Inequalities," *Discrete Applied Mathematics* **155**, pp. 1689-99 (2007).
25. D. Avis, H. Imai, and T. Ito, "On the Relationship Between Convex Bodies Related to Correlation Experiments with Dichotomic Observables," *Journal of Physics A* **39(36)**, pp. 11283-99 (2006).

26. T. Ito, H. Imai, and D. Avis, "Bell Inequalities Stronger than the CHSH Inequality for Three Level Isotropic States," *Physical Review A* **73(4)**, p. 042109(9 pages) (2006).
27. D. Avis and A. Deza, "Un des "Problèmes Plaisans et Délectables" de Claude Berge," *Discrete Mathematics* **306**, pp. 2299-2302 (2006).
28. D. Avis, C. De Simone, and B. Reed, "On the Fractional Chromatic Index of a Graph and its Complement," *Operations Research Letters* **33**, pp. 385-388 (2005).
29. D. Avis, J. Hasegawa, Y. Kikuchi, and Y. Sasaki, "A Quantum Protocol to Win the Graph Colouring Game on all Hadamard Graphs," *IEICE Trans. Fundamentals* **E89A**, pp. 1378-81 (2005).
30. D. Avis, H. Imai, T. Ito, and Y. Sasaki, "Two-party Bell Inequalities Derived from Combinatorics via Triangular Elimination," *Journal of Physics A* **38(50)**, pp. 10971-10987 (2005).
31. D. Avis and B. Kaluzny, "Solving Inequalities and Proving Farkas' Lemma Made Easy," *AMS Mathematical Monthly* **111**, pp. 152-157 (2004).
32. D. Avis and J. Umemoto, "Stronger Linear Programming Relaxations of Max-Cut," *Mathematical Programming* **B 97**, pp. 451-469 (2003).
33. D. Avis, C. De Simone, and P. Nobili, "On the Chromatic Polynomial of a Graph," *Mathematical Programming B* **B 92**, pp. 439-452 (2002).
34. D. Avis, K. Hosono, and M. Urabe, "On the Existence of a Point Set with a Specified Number of Interior Points," *Discrete Mathematics* **241**, pp. 33-40 (2001).
35. D. Avis and A. Deza, "On the Binary Solitaire Cone," *Discrete and Applied Mathematics* **115**, pp. 3-14 (2001).
36. D. Avis and A. Deza, "On the Solitaire Cone and its Relationship to Multicommodity Flows," *Mathematical Programming* **90-1**, pp. 27-57 (2001).
37. D. MacDonald, N. Kabani, D. Avis, and A.C. Evans, "Automated 3-D Extraction of Inner and Outer Surfaces of Cerebral Cortex from MRI," *Neuroimage* **12**, pp. 340-356 (2000).
38. D. Avis, A. Deza, and S. Onn, "A Combinatorial Approach to the Solitaire Game," *IEICE Trans. on Fund. of Electronics, Communications and Computer Sciences* **E83-A**, pp. 656-661 (2000).
39. D. Avis and L. Devroye, "Estimating the Number of Vertices of a Polyhedron," *Information Processing Letters* **73**, pp. 137-143 (2000).
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