

CURRICULUM VITAE

NAME: Ilias S. Kotsireas

Erdős number: 3

ADDRESS:

Wilfrid Laurier University
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CONTACT INFORMATION:

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e-mail: ikotsire@wlu.ca CARGO lab web page: <http://www.cargo.wlu.ca/>

Personal web page: <http://web.wlu.ca/science/physcomp/ikotsireas/>

DEGREES

- 1995-1998, Ph.D. Department of Computer Science, Université Paris 6, French National Bureau of Standards, (Bureau des Longitudes) Paris, France. *Dissertation Title* : “Algorithms for solving polynomial systems: application to central configurations in the N-body problem of celestial mechanics.”.
Advisor : Prof. Daniel Lazard
- 1994-1995, M.Sc. Department of Computer Science, Université Paris 6, French National Bureau of Standards, Paris, France. *Dissertation Title* : “Central configurations in the N-body problem”.
Advisors : Prof. Daniel Lazard, Dr. Alain Albouy, Dr. Pierre-Vincent Koseleff
- 1992-1994 B.Sc. Department of Computer Science, Université Paris 6, Paris, France.
- 1986-1990 B.Sc. Department of Mathematics, University of Athens, Athens, Greece.

EMPLOYMENT HISTORY

- July 2011 - present, Professor, Wilfrid Laurier University, Department of Physics and Computer Science, Waterloo, Ontario, Canada.
- December 2005 - July 2011, Associate Professor, Wilfrid Laurier University, Department of Physics and Computer Science, Waterloo, Ontario, Canada.
- July 2001 - December 2005, Assistant Professor, Wilfrid Laurier University, Department of Physics and Computer Science, Waterloo, Ontario, Canada.
- October 1999 - June 2001, Post-Doctoral Fellow, Ontario Research Centre for Computer Algebra, (OR-CCA) University of Western Ontario, London, Ontario, Canada.
- 1998-99 Lecturer (Attaché Temporaire Enseignement Recherche, ATER), Department of Computer Science, Université Paris 6, Paris, France.
- 1997-98 Laboratory Assistant (Travaux Dirigés, TD), Lycée Saint-Louis, Paris, France.
- 1994-98 Teaching Assistant (Formation Permanente) Department of Computer Science, Université Paris 6, Paris, France.
- 1995-96 Laboratory Assistant (Travaux Dirigés, TD), Université de Versailles Saint-Quentin-en-Yvelines, Versailles, France.

AFFILIATIONS (8)

- Affiliated Faculty: Center for Applied Optimization, University of Florida
<http://www.ise.ufl.edu/cao/>
- Associate Member: Ontario Research Centre for Computer Algebra <http://www.orcca.on.ca/>
- Adjunct Appointment: University of Waterloo, Computer Science <http://www.cs.uwaterloo.ca/>
- Faculty Member: Centre for Women in Science <http://www.wlu.ca/cwis>
- Core Faculty: Centre for Coupled Dynamics & Complex Systems <http://www.mmcs.wlu.ca/centre/>
- Laboratory of Algebraic and Geometric Algorithms, $E\rho\Gamma A$, <http://erga.di.uoa.gr/>
- Collaborator: Computational Intelligence lab, <http://cilab.math.upatras.gr/>
- OPTimization, Modelling and Applications, OPTIMA, <http://optima.cs.uoi.gr/>

HONOURS AND AWARDS (13)

- GeNeDis 2016 Award, October 21, 2016, Sparta, Greece
- Long Service (15 years) Award, September 28, 2016, Wilfrid Laurier University
- Merit Award, July 2016, Wilfrid Laurier University
- Best Poster Award, with M. Mohamedtaki et al. ACMES Conferences 2016 on Computationally Assisted Mathematical Discovery and Experimental Mathematics, Western University, London Ontario
- Merit Award, August 2012, Wilfrid Laurier University
- Merit Award, July 2009, Wilfrid Laurier University
- Merit Award, December 2005, Wilfrid Laurier University
- FTICA, Fellow of the Institute of Combinatorics and its Applications, January 28, 2004
- Best Poster Award, with D. Butcher, SHARCnet Power Partnership Performance event, January 2004, UWO, London ON, Canada
- ACM Web Assistant Award, ISSAC 2001 London, Ontario, Canada
- Best Poster Award, with A. Galligo, R. Corless, S. Watt, ISSAC 2001 London, Ontario, Canada
- Ontario Research Centre for Computer Algebra Post-Doctoral Fellowship, 1999-2001
- French Ministry of National Education Research and Technology Doctoral Scholarship, 1995-1998

SCHOLARLY AND PROFESSIONAL ACTIVITIES

- Chair, ACM SIGSAM, (Association for Computing Machinery Special Interest Group on Symbolic and Algebraic Manipulation) July 1, 2013 - July 1, 2017, <http://www.sigsam.org/>

i. Editorial Activities (11)

- Managing Editor, **SN ORFO**, Springer Nature, May 1, 2019 -
- Editor-in-Chief, **Journal of Algebraic Combinatorics** (JACO), Springer, October 15, 2017 -
- Managing Editor, **Mathematics in Computer Science**, Birkhäuser/Springer, January 1, 2017 -
- Editorial Board, January 2015 - January 2020, **Journal of Combinatorial Designs**, Wiley
- Editorial Board, **SpringerPlus**, Springer
- Editorial Board, **Journal of Algebra Combinatorics Discrete Structures and Applications**, published by Yildiz Technical University, Turkey
- Editorial Board, **Mathematics in Computer Science**, 2007 - 2017, Birkhäuser/Springer

- Editorial Board, **Journal of Computational Science**, published by Elsevier
- Editorial Board, **Optimization Letters**, published by Springer
- Editorial Board, **Special Matrices**, published by De Gruyter
- Editor, July 2003 - July 2013, **Communications in Computer Algebra**, published by ACM SIGSAM

ii. *Memberships (past and present)*

- ACM/SIGSAM (Association for Computing Machinery, Special Interest Group on Symbolic and Algebraic Manipulation)
- AMS (American Mathematical Society)
- HMS (Hellenic Mathematical Society)
- CMS (Canadian Mathematical Society)
- ICA (Institute of Combinatorics and its Applications)

iii. *Guest Editor for Special Issues of Journals (25)*

1. **Mathematics and Computers in Simulation**, Elsevier, Special Issue on *Applications of Computer Algebra in Science, Engineering, Simulation and Special Software*, 67, 2004, no. 1–2. Guest Editors: M. Wester, E. A. Arnold, P. Gianni, I. S. Kotsireas, E. Roanes-Lozano, S. Steinberg
2. **Journal of Symbolic Computation**, Elsevier, Special Issue on *Applications of Computer Algebra*, 40, 2005, no. 4-5. Guest Editors: I. S. Kotsireas, A. G. Akritas, S. Steinberg, M. Wester
3. **Mathematics in Computer Science**, Birkhäuser/Springer, Special Issue on *Modeling and Analysis of Complex Systems*, 1, 2007, no. 3. Guest Editor: I. S. Kotsireas
4. **Journal of Statistical Planning and Inference**, Elsevier, Special Issue on *Metaheuristics, Combinatorial Optimization and Design of Experiments*, 139, 2009, Issue 1. Guest Editors: C. Koukouvinos, I. S. Kotsireas
5. **Journal of Computational and Applied Mathematics**, Elsevier, Special Issue with papers from *NumAn 2007*, 227, 2009, no. 1. Guest Editors: E. Gallopoulos, A. Hadjidimos, I. S. Kotsireas, D. Noutsos, M. N. Vrahatis
6. **Applied Numerical Mathematics**, Elsevier, Special Issue with papers from *NumAn 2008*, Volume 60, Issue 4, Pages 293–512 (April 2010) Guest Editors: G. Akrivis, E. Gallopoulos, A. Hadjidimos, I. S. Kotsireas, D. Noutsos, M. N. Vrahatis
7. **Journal of Symbolic Computation**, Elsevier, Special Issue on *Groebner Bases and Applications*, Volume 46, 2011, Guest Editors: E. Arnold, I. S. Kotsireas, M. Rosenkranz
8. **Theoretical Computer Science**, Elsevier, Special Issue on *Symbolic Numeric Computation*, Volume 412, Issue 16, Pages 1443–1543, (April 2011), Guest Editors: I. Kotsireas, B. Mourrain, V. Pan
9. **Mathematics in Computer Science**, Birkhäuser/Springer, Special Issue on *Matroids in Coding Theory and Related Topics*, Guest Editors: I. S. Kotsireas, I. Márquez-Corbella, E. Martínez-Moro 2012, Volume 6, Number 2, Pages 107–108
10. **Journal of Computational Science**, Elsevier, Special Issue on *Computational Methods for Hyperbolic Problems*, Guest Editors: J.-H. Jung, I.S. Kotsireas, R. Melnik, A. Tesdall, 2013, Volume 4, Issues 1-2, Pages 1–124
11. **Theoretical Computer Science**, Elsevier, Special Issue on *Symbolic Numeric Computation 2011*, Guest Editors: I. Kotsireas, B. Mourrain, V. Pan, L. Zhi, 2013, Volume 479, April 2013, Pages 1–3.

12. **Applied Numerical Mathematics**, Elsevier, Special Issue with papers from *NumAn 2010*, Guest Editors: V. Dougalis, E. Gallopoulos, A. Hadjidimos, I. S. Kotsireas, D. Noutsos, Y. Saridakis, M. N. Vrahatis Volume 67 (2013), Pages 1-3.
13. **Journal of Computational Science**, Elsevier, High performance computing theory and applications - Proceedings of SHARCNET Research Day 2012 (Guelph, Ontario). Guest Editors: I. Kotsireas, L. Krivodonova, S. McConnell, E. Schnetter Volume 5, Issue 3, (2014) Pages 497–498.
14. **Designs, Codes and Cryptography**, Springer, Computer Algebra in Coding Theory and Cryptography, Guest Editors: I. S. Kotsireas, E. Martínez-Moro, Volume 76 (2015), no. 1, Pages 1-2.
15. **Applied Numerical Mathematics**, Elsevier, A. Hadjidimos, I. Kotsireas, D. Noutsos, M. Vrahatis [Special issue: NumAn 2012] Volume 104 (2016), Pages 1-2.
16. **Applied Numerical Mathematics**, Elsevier, G. Akrivis, V. Dougalis, E. Gallopoulos, A. Hadjidimos, I. Kotsireas, D. Noutsos, Y. Saridakis, M. Vrahatis [Special issue: NumAn 2014] Volume 104 (2016), Pages 99-102.
17. **Mathematics in Computer Science**, Birkhäuser/Springer, Thierry Dana-Picard, Wolfram Koepf, Ilias Kotsireas, Zoltan Kovacs, Alexander Prokopenya, Werner Seiler [Special issue: ACA 2016, Kassel, Germany] Volume 11 (2017) Issues 3-4, pp. 251–540.
18. **Complexity**, Hindawi, P. Vlamos, I. Kotsireas, D. Vlachakis, Special Issue on "Complexity in Medical Informatics," vol. 2019, Article ID 8658124, 2019.
19. **Theoretical Computer Science**, Elsevier, Special Issue with papers from CAI 2017 Kalamata, Greece, Guest Editors: Manfred Droste (Germany), Ilias Kotsireas (Canada), Robert Rolland (France), TCS 800 (2019), pp. 1–2.
20. **Annals of Mathematics and Artificial Intelligence**, Guest editorial: revised selected papers from the LION 12 conference, Ilias S. Kotsireas, Panos M. Pardalos, Ann. Math. Artif. Intell. 88, pp. 1–2, 2020. <https://link.springer.com/journal/10472/88/1>
21. **Mathematics in Computer Science** 13, issues 1-2, pp. 1–328, 2019 **Mathematics in Computer Science**, Special Issue with papers from ACA 2017 Jerusalem, Israel, Guest Editors: Michel Beaudin (Montreal), Noah Dana-Picard (Israel), Alexander Levin (USA), Christoph Koutschan (Austria), Ilias Kotsireas (Canada), Daniel Robertz (United Kingdom).
22. **Mathematics in Computer Science** 12, December 2018, Issue 4, pp. 371–490 Special Issue with papers from the 5th Workshop on Real and Complex Hadamard Matrices and Applications, Budapest, Hungary, Guest Editors: Dardo Goyeneche (Poland), Pádraig O’Cathain (United States), Ilias Kotsireas (Canada).
23. **AAECC**, Special Issue: "Computer Algebra and Application to Combinatorics, Coding Theory and Cryptography" ACA 2019, Montreal, Canada, July 16–20, 2019, Guest Editors: Kenza Guenda, Iiro Honkala, Ilias Kotsireas, Teo Mora, Qiang Wang
24. **Mathematics in Computer Science**, Special Issue with papers from ACA2 2018 Santiago de Compostela, Spain, Guest Editors: Anna Maria Bigatti, Francisco Botana, Thierry Dana-Picard, Felipe Gago, Ilias Kotsireas, Manuel Ladra, Wei Li.
25. ON-GOING **Annals of Mathematics and Artificial Intelligence**, LION 14 conference, Guest Editors: Ilias S. Kotsireas, Panos M. Pardalos

iv. Selected research visits & stays

- Research Institute for Symbolic Computation, RISC-Linz, November 1999, Linz, Austria.
- Center for Nonlinear Phenomena and Complex Systems, Université Libre de Bruxelles, CENOLI, ULB, February 2001, Brussels, Belgium.
- Intensive Summer School in Computer Algebra, July 2001, Queen's University, Kingston, Ontario, Canada.
- ZIB-Berlin, Germany.
- MMRC, Beijing, P.R. China.
- EAGER - EMS Summer School on Computational Algebraic Geometry and Applications Eilat, Israel, February 2002.
- School of Mathematical Sciences, South China Normal University, Guangzhou, P. R. China, 2007.
- CAO, University of Florida, December 2008.
- Claude Shannon Institute, University College, Dublin, Ireland, July 2009.
- University of Athens, ERGA lab, Athens, Greece, March 15, 2015 - April 15, 2015.

v. Conference Referee (8)

- ISSAC, SNC, SYNASC, CASC, MEGA, ADG, MACIS, GECCO

vi. External Grant Referee

- MITACS Accelerate program, October 2011
- GEAR (Grants to Enhance and Advance Research) University of Houston, February 2010
- MITACS ERC (Elevate Review Committee), January/February 2010
- NSERC CRC (Canadian Research Chairs) Program, April 2007
- National Science Foundation (NSF) Panel member, May 2001, Arlington VA, USA
- National Science Foundation (NSF) Panel member, May 2007, Arlington VA, USA
- SHARCnet¹ Resource Allocation Committee, Round VI, May 2007, London ON, Canada
- SHARCnet Resource Allocation Committee, Round VII, December 2007, London ON, Canada

vii. Tenure and Promotion Committees Evaluator (4)

- University of Ioannina, Greece
- Technical University of Chania, Crete, Greece
- Aristotle University of Thessaloniki, Greece
- University of Thessaly, Volos, Greece

¹SHARCnet stands for Shared Hierarchical Academic Research Computing Network

vii. *Journal Referee (52)*

Journal of Symbolic Computation	Mathematics of Computation
Discrete Mathematics	Theoretical Computer Science
Journal of Combinatorial Designs	Cryptography and Communications
Numerical Algorithms	SIAM Journal on Scientific Computing
Journal of Combinatorial Optimization	Optimization Letters
Linear Algebra and Its Applications	Australasian Journal of Combinatorics
Special Matrices	Canadian Journal of Physics
Journal of Integer Sequences	Journal of Computational Science
Journal of Parallel and Distributed Computing	Mathematics and Computers in Simulation
Mathematical and Computer Modelling	Mathematics in Computer Science
Journal of Geodesy	Applied Mathematics Letters
Applied Numerical Mathematics	Applied Mathematics and Computation
Computational Optimization and Applications	Statistics and Computing
Journal of Statistical Planning and Inference	Journal of Statistical Theory and Practice
Journal of Applied Statistics	Journal of Computational and Applied Mathematics
Journal of Mathematical Physics	Journal of Optimization Theory and Applications
Communications in Computer Algebra	TEST/SEIO, Spanish Society of Statistics and OR
Crux Mathematicorum	Journal of Computer Science and Technology
Mathematical Problems in Engineering	Journal of Applied Mathematics and Computing
Applied Soft Computing	International Journal of Bio-Inspired Computation (IJBIC)
Linear and Multilinear Algebra	Journal of Algebraic Combinatorics
SN Operations Research Forum	Discrete Mathematics Algorithms and Applications
Heliyon	European Journal of Operational Research
Soft Computing	Journal of Algebraic Combinatorics

Applicable Algebra in Engineering, Communication and Computing
International Journal of Computers and Mathematics With Applications
International Journal on Computational Geometry and Applications
IEEE Communications Letters

viii. *Conference Organization* (85)

1. COCOA 2020, 14th Conference on Combinatorial Optimization and Applications Dallas, Texas, USA, December 11-13, 2020, TPC member
2. ACA 2020, Athens, Greece, General Chair (moved to ACA 2021, Athens, Greece, due to COVID-19 pandemic)
3. ICCS 2020, Amsterdam, Holland, Program Committee member
4. ISSAC 2020, Kalamata, Greece, July 20-23, 2020, Local Organizer (moved on-line, due to COVID-19 pandemic)
5. LION 14, Athens, Greece, Local Organizer
6. IEEE ICBC 2020, Toronto, ON, Canada, May 4-7, 2020, Publication Chair
7. Decentralized 2019, Oct 30, 2019 - Nov 1, 2019, Athens, Greece, Academic Track Program Committee Member
8. Maple User Conference, October 2019, Waterloo, Ontario, Canada, General Chair
9. ICANN2019, 28th International Conference on Artificial Neural Networks, September 17-19, 2019, Munich, Germany, PC member
10. ArasuFest, Kalamata, Greece, General Chair
11. ACA 2019, Montreal, July 2019, co-organizer: "Special Session on Computer Algebra and application to combinatorics, coding theory and cryptography"
12. AIST 2019 8th International Conference - Analysis of Images, Social networks and Texts 17-19 JULY Kazan, Russia, PC member
13. DOD 2019 Kalamata, Greece, General Chair
14. SEA 2019, Kalamata, Greece, General Chair
15. IEEE ICBC 2019, Seoul, Korea, Technical Program Committee, (TPC)
16. The First International Conference on Mathematical Research for Blockchain Economy, MARBLE 2019, 06-10 May 2019, Santorini, Greece, Local Chair
17. 4th International Conference on Numerical and Symbolic Computation Developments and Applications, SYMCOMP2019, 11-12 April 2019, Porto, Portugal, Scientific Committee
18. INTERNATIONAL CONFERENCE ON COMPUTATIONAL SCIENCE, Wuxi, China, 11-13 June, 2018
19. LION12, Learning and Intelligent OptimizatioN Conference, Kalamata, Greece, June 10-15, 2018
20. AIST 2017 6th International Conference on Analysis of Images, Social Networks, July 27 - 29, 2017, Moscow, Russia, Program Committee
21. MCA 2017 Montreal, Canada, Special Session "Finite Algebraic Combinatorics and Applications" co-organizer
22. ACA 2017 Jerusalem, Israel, General Chair
23. DOD 2017 Kalamata, Greece, General Chair
24. CAI 2017 Kalamata, Greece, General Chair
25. Computational Discovery 2016 London, ON, Canada, Program Committee
26. COCOA 2015 Houston, Texas, United States, Program Committee
27. MACIS 2015 Berlin, Germany, General Chair

28. Workshop on Symbolic Combinatorics and Computational Differential Algebra Fields Institute, Toronto, Canada, Program Committee
29. ACA 2015, Kalamata, Greece, General Chair
30. DOD 2015, Kalamata Greece, General Chair
31. ICCS 2015, Reykjavk, Iceland, Program Committee
32. COCOA 2014, Maui, Hawaii, USA, Program Committee
33. Quantum Optimization Workshop, October 2014, Fields Institute, Toronto, Organizing Committee.
34. NUMAN 2014 Chania, Greece, Organizing Committee
35. AISC 2014 Seville, Spain, Programme Committee
36. GECCO 2014 Vancouver, Canada, ACO-SI PC Member
37. ICCS 2014 Cairns, Australia, Programme Committee
38. SNC 2014 Shanghai, China, Programme Committee
39. ICWIP 2014 Waterloo, ON, Canada, Local Organizing Committee
40. ACA 2014 New York City, USA, Programme Chair
41. AMMCS 2013, Waterloo, ON, Canada, General Chair
42. ACA 2013, Malaga, Spain, Session Organizer, Programme Committee
43. ANODE 2013 Auckland, New Zealand, Organising Committee
44. NUMAN 2012, Ioannina, Greece, Organizing Committee
45. MACIS 2011, Beijing, China, Program Committee Chair
46. AMMCS 2011, Waterloo, ON, Canada, General Chair
47. SNC 2011, San Jose, CA, USA, General Chair
48. ISSAC 2011, San Jose, CA, USA, Fundraiser
49. WWCA 2011, W80, Waterloo, ON, Canada, Organizer
50. SEA 2011, Crete, Greece, Program Committee
51. PCA 2011, St. Petersburg, Russia, Program Committee
52. COCOA 2010, Hawaii, USA, Program Committee
53. ISSAC 2010 Munich, Germany, Poster Committee Chair
54. DMBIO 2010 Chania, Greece, Advisory Committee
55. SNC 2009 Kyoto, Japan, Program Committee Chair
56. CICM 2009/MKM 2009/Calculus 2009 Grand Bend, ON, Canada, Program Committee, Publicity Chair
57. COCOA 2009 Yellow Mountains, China, Program Committee
58. SSGC 2009, 2nd SHARCnet Symposium on GPU and CELL Computing, UW, Organizing Committee
59. LSRS 2009, Laurier SHARCnet Research Symposium Waterloo, Ontario, Canada, Organizer
60. ACA 2008 Session on Grobner Bases and their Applications webpage Linz, Austria
61. SSGC 2008, SHARCnet Symposium on GPU and CELL Computing, UW, Organizing Committee
62. NumAn 2008 Kalamata, Greece, Organizing Committee, Local Organizing Committee
63. WWCA 2008 Waterloo, Ontario, Canada, General Chair

64. MICA 2008 Stonehaven Bay, Trinidad and Tobago, Publicity Chair
65. HPCS 2008 Quebec City, Canada, Program Committee
66. NumAn 2007 Kalamata, Greece, Organizing Committee, Local Organizing Committee
67. MC06 Maple Conference 2006, Waterloo, Ontario, Canada, General Chair
68. MACIS 2006 Beijing, China, Program Committee
69. WWCA 2006 Waterloo, Ontario, Canada, General Chair
70. ISSAC 2006 Genova, Italy, Publicity Chair
71. HPCS 2006 St. John's, Newfoundland, Canada, Program Committee
72. CASC 2005 Kalamata, Greece, General Chair
73. ACA 2005 Session on Computer Algebra and Coding Theory, Nara, Japan,
74. ECCAD 2005 Ashland, Ohio, USA, Advisory Council
75. ISSAC 2005 Beijing, China, Publicity Chair
76. MC05 Maple Conference 2005, Waterloo, Ontario, Canada, General Chair
77. HPCS 2005 Guelph, Ontario, Canada, Scientific Committee Chair and Steering Committee Member
78. ISSAC 2004 University of Cantabria, Santander, Spain, Poster Committee
79. ECCAD 2004 Waterloo, Ontario, Canada, General Chair
80. ICPSS 2004 Paris, France, Program Committee
81. ACA 2002 Volos, Greece, General Chair
82. ISSAC 2001 London, Ontario, Canada, Local Arrangements
83. CASC 2000 Samarkand, Uzbekistan, Program Committee
84. ECCAD 2000/SONAD 2000 London, Ontario, Canada, Local Arrangements
85. Permanent member of the ACAWG (Applications of Computer Algebra Working Group) since 2000.

STUDENT SUPERVISION (42)

1. Mohamed Al-Thibeh, Directed Research CP494, Fall 2019
2. Virackdara Chhom, Directed Research CP494, Fall 2019
3. Shuaib Reeyaz, Directed Research CP494, Fall 2019
4. Andrew Chua, Directed Research CP494, Fall 2019
5. Muzammil Elahi, Directed Research CP494, Fall 2019
6. Rishhi Balakrishnan, Directed Research CP494, Fall 2019

Past Students:

1. Dan Butcher, SHARCnet Round III Graduate Fellowship
2. Jason Cousineau, Research Assistant
3. Cris Frusina, Directed Research Course
4. Alexei Karpenko, Research Assistant
5. Derek Knapp, SHARCnet Round VI Undergraduate Fellowship, Research Assistant
6. Edmond Lau, Research Assistant
7. Chris Odorjan, Research Assistant
8. Gil Pinheiro, Directed Research Course, Research Assistant
9. Dimitra Rentas, co-op Student
10. Michael Sukman, Research Assistant
11. Paul Walrath, Directed Research Course, Research Assistant
12. Noor Hadi, Research Assistant
13. Mike Koldychev, Research Assistant
14. Kyrylo Stepanchuk, Directed Research Course
15. Seanachi Dillon, Directed Research Course
16. Joel Hobson, Research Assistant, co-supervised with Eugene Zima
17. Yuzhen Xie, Post-doctoral Fellow, MITACS Elevate, co-supervised with Marc Moreno Maza
18. Fei Wang, MSc (University of Waterloo, Computational Mathematics) co-supervised with Mark Giesbrecht
19. Kelvin Chung, MSc (University of Waterloo, Computer Science) co-supervised with Mark Giesbrecht
20. Dalibor D. Dvorski, Directed Research Course
21. Harold Hodgins, Directed Research Course
22. Lawrence Barrett, MSc (University of Waterloo, Computational Mathematics) co-supervised with Arne Storjohann
23. George Lifchits, Directed Research Course, co-supervised with Shohini Ghose
24. Lara Jeftic, Directed Research Course
25. Scott King, Directed Research Course, NSERC RA, CARGO Lab
26. Ian Li, Directed Research Course, NSERC RA
27. Mohamed Mohamedtaki, Directed Research Course, co-supervised with Barbara Collignon (IBM)

28. Giacinto Romano, Directed Research Course, currently employed at Loblaw
29. Michael Roher, Directed Research Course
30. Christian McFarland, Directed Research Course
31. Daniel Berezovski, Directed Research Course, RA, CARGO Lab
32. Noora Al-Dabbagh, MSc, MAC program, September 2018
33. Ryan Kazmerik, CP682 Special Topics, Natural Language Processing, September 2018
34. Emils Matiss, RA, CARGO Lab
35. Tejasvi Pal, Directed Research Course, Spring 2019
36. Min Kang, Directed Research Course, Spring 2019

TEACHING (9)

1. CP102 Information Processing with Microcomputer Systems, Fall 2004, Winter 2006, Winter 2007.
2. CP114 Data Structures I, Winter 2005.
3. CP315 Introduction to Scientific Computation, Fall 2004, Fall 2005, Winter 2012, Winter 2013, Winter 2018
4. CP363 Databases I, Winter 2002, Winter 2003, Winter 2004, Winter 2005, Winter 2006, Winter 2007.
5. CP400N Introduction to Parallel Programming, Winter 2012, Winter 2013, Winter 2014, Fall 2017.
6. CP411 Computer Graphics, Fall 2002, Fall 2005, Fall 2015.
7. CP463 Discrete Event Simulation, Winter 2002, Winter 2003, Winter 2004, Winter 2007, Winter 2009, Fall 2011.
8. CP465 Databases II, Fall 2002, Winter 2007, Winter 2009, Winter 2010, Fall 2013.
9. CP468 Artificial Intelligence, Winter 2010, Winter 2013, Fall 2015, Fall 2017.

INTERNAL RESEARCH FUNDING

Year	Source	Type	Amount	Purpose
2002	WLU	Conference/Workshop Grant	\$ 3000	ACA 2002
Fall 2003	WLU	Course Remission Grant	\$ 10000	Research
2004	WLU	Conference/Workshop Grant	\$ 3000	ECCAD 2004
2004	WLU	Laurier Lecture co-sponsorship Fund	\$ 1100	CSASM
2004	WLU	STEP	\$ 5000	CSASM
2004	WLU	Academic Development Fund	\$ 1100	ICPSS 2004
2005	WLU	Academic Development Fund	\$ 1500	CASC 2005
2005	WLU	Merit Award	\$ 3000	Research
2006	WLU	Academic Development Fund	\$ 3000	WWCA 2006
2008	SHARCnet & WLU	Funding	\$ 8000	CSASM
2009	WLU	Merit Award	\$ 3000	Research
2010	WLU	Special Initiatives Fund	\$ 3000	Centenary AMMCS
2011	WLU	Conference/Workshop Grant	\$ 4800	WWCA 2011
2012	WLU	Merit Award	\$ 3000	Research

EXTERNAL RESEARCH FUNDING

Year	Source	Type	Amount	Purpose
2010-2011	SHARCnet	Site Leader Grant	\$ 8000	Research
2002-2006	NSERC	Individual Research Grant	\$ 64000	Research
2006-2010	SHARCnet	Site Leader Grant	\$ 32000	Research
2002	SHARCnet	Round III Graduate Fellowship	\$ 22000	Grad. Fell.
2006-2011	NSERC	Individual Research Grant	\$ 75000	Research
2007-2008	EU	ENTER	€ 96000	Research
2007	SHARCnet	Round VI Undergraduate Fellowship	\$ 7000	Undergrad. Fell.
2008	Fields Institute	Conference Organization	\$ 11000	WWCA 2008
2011	Fields Institute	Conference Organization	\$ 16000	WWCA 2011
2011	Fields Institute	Conference Organization	\$ 16000	AMMCS 2011
2011	MITACS	Elevate Postdoctoral Fellowship	\$ 55000	Research
2011-2016	NSERC	Individual Research Grant	\$ 70000	Research
2012	Fields Institute	Conference Organization	\$ 12000	AMMCS 2013
2017-2019	NSERC	Individual Research Grant	\$ 30000	Research

PUBLICATIONS

PAPERS IN REFEREED JOURNALS (74)

1. I. S. Kotsireas. Central configurations in the Newtonian N-body problem of Celestial Mechanics. **Contemporary Mathematics**, AMS, vol. 286, 2000, pp. 71–98
2. I. S. Kotsireas. Homotopies and polynomial system solving I. Basic Principles. *SIGSAM Bulletin*, March 2001, vol. 35, no. 1, issue 135, pp. 19-32
3. I. S. Kotsireas and D. Lazard. Central Configurations of the 5-body problem with equal masses in three-dimensional space. **J.Math. Sci. (New York)**, vol. 108, 2002, no. 6, pp. 1119–1138
4. K. Karamanos, I. Kotsireas. Thorough numerical entropy analysis by lumping of some substitutive sequences. **Kybernetes** 2002, Volume 31, no. 9/10, pp. 1409–1417
5. H. Evangelaras, I. Kotsireas, C. Koukouvinos. Applications of Groebner bases to the analysis of certain two or three level factorial designs. **Advances and Applications in Statistics** 3, no. 1, 2003 pp. 1–13.
6. I. Kotsireas, K. Karamanos. Exact computation of the Bifurcation point B4 of the logistic map and the Bailey-Broadhurst conjectures. **International Journal of Bifurcation and Chaos** Volume 14, no. 7, 2004, pp. 2417–2423
7. I. S. Kotsireas, C. Koukouvinos, Inequivalent Hadamard matrices with buckets, **J. Discrete Math. Sci. Cryptogr.** 7, 2004, no. 3, pp. 307–317.
8. I. Kotsireas, C. Koukouvinos and M.P. Rogantin, Inequivalent Hadamard matrices via indicator functions. **Int. J. Applied Math.** 16, 2004, no. 3, pp. 355–363.
9. K. Karamanos, I. Kotsireas, Statistical analysis of the first digits of the binary expansion of Feigenbaum constants α and δ , **Journal of the Franklin Institute**, Volume 342 (2005) pp. 329–340.
10. I. S. Kotsireas, C. Koukouvinos, Genetic Algorithms for the construction of Hadamard matrices with two circulant cores **J. Discrete Math. Sci. Cryptogr.** 8, 2005, no. 2, pp. 241–250.
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32. SUBMITTED: (2018) Aristidis Vrahatis, Ilias Kotsireas, Panayiotis Vlamos, Detecting common pathways and key molecules of Neurodegenerative Diseases from the topology of molecular networks GeNeDis 2018, October 2018, Toronto, ON, Canada
33. SUBMITTED: (2018) Aristidis Vrahatis, Ilias Kotsireas, Panagiotis Vlamos, A Systems Biology Approach for the Identification of active molecular pathways during the progression of Alzheimer’s Disease GeNeDis 2018, October 2018, Toronto, ON, Canada
34. Curtis Bright, Dragomir Djokovic, Vijay Ganesh, Ilias Kotsireas, A SAT+CAS Approach to Finding Good Matrices: New Examples and Counterexamples, Proceedings of the 33rd AAAI Conference on Artificial Intelligence, Honolulu, Hawaii, USA. January 27 February 1, 2019, AAAI Press 2019.
acceptance rate: 16.2%
35. ACCEPTED: (2019)
Ludwig Kampel, Dimitris E. Simos, Bernhard Garn, Ilias Kotsireas and Evgeny Zhereshchin
Algebraic Models for Arbitrary Strength Covering Arrays over v -ary Alphabets
Conference in Algebraic Informatics (CAI 2019), Nis, Serbia
36. ACCEPTED: (2019)
13th Learning and Intelligent Optimization Conference (LION 13) Chania, Crete, Greece. How to use Boltzmann Machines and Neural Networks for Covering Array Generation
Ludwig Kampel, Michael Wagner, Ilias Kotsireas and Dimitris E. Simos
37. ACCEPTED: (2019)
CASCON 2019, IBM, Toronto SAT Solvers and Computer Algebra Systems: A Powerful Combination for Mathematics
Curtis Bright, Ilias Kotsireas, Vijay Ganesh
38. ACCEPTED: SPRINGER CCIS SERIES, (2019)
Proceedings of the Maple Conference 2019, Waterloo, ON, Canada
Curtis Bright, Ilias Kotsireas, Vijay Ganesh
Effective problem solving using SAT solvers

39. CASC 2019, Moscow
Ilias Kotsireas, Youtong Liu, Jing Yang PAF reconstruction with the orbits method
40. CASC 2019, Moscow
Remi Imbach, Victor Y. Pan, Chee Yap, Ilias Kotsireas, Vitaly Zaderman
Root-finding with Implicit deflation
41. MC 2019, Maple in Mathematics Education and Research,
Curtis Bright, Jurgen Gerhard, Ilias Kotsireas, Vijay Ganesh
Effective Problem Solving Using SAT Solvers
42. SUBMITTED: (2019), SAT 2019, LISBON
Curtis Bright, Dragomir Djokovic, Ilias Kotsireas, Vijay Ganesh
The SAT+CAS Method for Combinatorial Search with Applications to Best Matrices
43. SUBMITTED: (2019), IJCAI 2019
A Verifiable Search for Projective Planes of Order Ten
Curtis Bright, Kevin Cheung, Brett Stevens, Dominique Roy, Ilias Kotsireas, Vijay Ganesh
44. ACCEPTED: FEB 2020, ACA 2019, MONTREAL, AAEECC SPECIAL ISSUE
A SAT Certification of the Nonexistence of Projective Planes of Order Ten Containing Weight 15 Codewords
Curtis Bright, Kevin Cheung, Brett Stevens, Dominique Roy, Ilias Kotsireas, Vijay Ganesh
45. ACCEPTED: MARCH 10, 2020, IWCCA 2020, BORDEAUX, FRANCE
Curtis Bright, Kevin K. H. Cheung, Brett Stevens, Ilias Kotsireas and Vijay Ganesh
Nonexistence Certificates for Ovals in a Projective Plane of Order Ten
46. ACCEPTED: APRIL 20, 2020, IJCAI-PRICAI 2020, YOKOHAMA, JAPAN
Unsatisfiability Proofs for Weight 16 Codewords in Lam's Problem
acceptance rate of 12.6%
47. SUBMITTED: MAY 30, 2020, KR 2020 (17TH CONFERENCE ON PRINCIPLES OF KNOWLEDGE REPRESENTATION AND REASONING)
Knowledge Representation in the Search for Projective Geometries
Curtis Bright, Kevin K. H. Cheung, Brett Stevens, Ilias Kotsireas, Vijay Ganesh

COLLECTIONS EDITED (3)

1. Laurier SHARCnet Research Symposium, LSRS 2009, Collection of Abstracts, 8 pages.
2. International Symposium on Symbolic and Algebraic Computation, ISSAC 2004, University of Cantabria, Santander Spain. Collection of Poster Abstracts, 55 pages.
3. East Coast Computer Algebra Day, ECCAD 2004, Waterloo, Canada, Collection of Abstracts, 22 pages.

CHAPTERS IN BOOKS and HANDBOOKS (3)

1. I. Kotsireas. Algorithms and Meta-heuristics for Combinatorial Matrices. Handbook of Combinatorial Optimization, 2nd Edition, 2013, Panos Pardalos, Ding-Zhu Du, Ronald Graham (Editors) pp 283–309.
2. I. Kotsireas. Panorama of methods for exact implicitization of algebraic curves and surfaces. Geometric Computation, World Scientific, 2003, Dongming Wang, Falai Chen (Editors) pp 126–155.
3. I. Kotsireas. Central Configurations in the Newtonian N-body problem of Celestial Mechanics. Computer Algebra Handbook, Springer Verlag, 2002, Johannes Grabmeier, Erich Kaltofen, Volker Weispfenning (Editors) pp 176–180.

BOOK (1)

1. ON-GOING, 2020 Dimitris Souravlias, Konstantinos E. Parsopoulos, Ilias S. Kotsireas, Panos M. Pardalos Algorithm Portfolios: Advances, Applications and Challenges

TECHNICAL REPORTS (9)

1. I. S. Kotsireas. A Survey on Solution Methods for Integral Equations June 2008, Technical Report TR-08-03 ORCCA
2. K. Karamanos, I. Kotsireas. Fractal structure of the block-complexity function April 2008, Technical Report M/08/24 Prépublication I.H.E.S. Bures-sur-Yvette France
3. I. Z. Emiris, I. S. Kotsireas. On the Support of the Implicit Equation of Rational Parametric Hypersurfaces. August 2002, Technical Report TR-02-01 ORCCA
4. I. Kotsireas and G. Reid. Alternative Ways of Solving Polynomial Systems. 2001, Technical Report TR-01-03 ORCCA
5. I. S. Kotsireas. Homotopy and polynomial system solving. 2000, Technical Report TR-00-23 ORCCA
6. R. M. Corless, M. Giesbrecht, I. Kotsireas and S. Watt Symbolic-Numeric Algorithms for Polynomials 2000, Technical Report TR-00-21 ORCCA
7. Robert M. Corless, Mark W. Giesbrecht, Ilias S. Kotsireas and Stephen M. Watt. Numerical implicitization of parametric hypersurfaces with linear algebra. 2000, Technical Report TR-00-03 ORCCA
8. I. Kotsireas and J. Schicho. *A Computer Algebra solution to a planar newtonian 4-body problem with unequal masses*. Technical Report 00-16/2000 RISC-Linz.
9. I. Kotsireas. *Configurations centrales dans le problème des N Corps*. M.Sc. Thesis, 1995, LIP6, Université Paris 6, (in french)

PLENARY & INVITED TALKS (30)

1. The Second International Congress in Algebras and Combinatorics (ICAC 2007), Xian University of Architectural Technology and Science, July 2007, Xian, China, plenary speaker.
2. Applications of Computer Algebra (ACA 2013), Malaga, Spain, plenary speaker.
3. Compute Ontario Research Day (CORD 2014), Perimeter Institute for Theoretical Physics, Waterloo, ON, Canada, May 7, 2014, plenary speaker.
4. Algebraic Design Theory and Hadamard Matrices (ADTHM 2014), University of Lethbridge, Lethbridge, AB, Canada, July 8–11, 2014, invited speaker.
5. 7th International Week Dedicated to Mathematics, Thessaloniki, Greece, March 18–22, 2015, invited speaker.
6. Algebraic Combinatorics and Applications, the first annual Kliakhandler Conference Michigan Technological University, Houghton, Michigan, USA August 26–30, 2015, invited speaker.
7. Workshop on Linear Computer Algebra and Symbolic-Numeric Computation, Thematic Program in Computer Algebra, Fields Institute, Toronto, ON, Canada, October 26–31, 2015, invited speaker.
8. International Conference on Coding theory and Cryptography (ICCS 2015), Algiers, Algeria, Université des Sciences et de la Technologie Houari Boumediene, November 2–5, 2015, invited speaker.
9. 8th International Week Dedicated to Mathematics, Thessaloniki, Greece, March 30, 2016 – April 3, 2016, invited speaker.
10. April 26, 2016, PageRank seminar at Google Waterloo.
11. International Industrial Mathematics Conference-I, I²MC-I, 2016, University of Sri Jayewardenepura, Sri Lanka, June 3–5, 2016, plenary speaker.
12. Nordic Combinatorial Conference 2016, Levi, Kittilä, Finland, June 13-15 2016, plenary speaker.
13. 9th International Week Dedicated to Mathematics, Thessaloniki, Greece, March 15–19 2017, invited speaker.
14. April 2017, Perifereia Ioniwn Nisiwn (PIN) meeting, Ionian University, Corfu, Greece, invited speaker.
15. April 2017, Series of talks on MPI, Institute of Physical Chemistry, National Center for Scientific Research "Demokritos", Athens, Greece.
16. May 10-14, 2017, Summer School on Operational Research and Applications, Nizhny Novgorod, Russia, invited speaker.
17. May 17, 2017, LATNA Seminar Series, Nizhny Novgorod, Russia, invited speaker.
18. June 29-30, 2017, Conference on Approximation and Optimization: Algorithms, Complexity, and Applications, National and Kapodistrian University of Athens (NKUA), invited speaker.
19. November 3, 2017, Data Mining seminar at the Bank of Canada HQ in Ottawa.
20. 10th International Week Dedicated to Mathematics, Thessaloniki, Greece, April 25-29, 2018, invited speaker.

21. July 09, 2018, 25th Summer School on Dynamical Systems and Complexity, National Center for Scientific Research "Demokritos", Athens, Greece, invited speaker.
22. July 11, 2018, SC^2 workshop, Oxford, United Kingdom (part of the FLoC 2018 conferences)
23. July 14-16, 2018, Charles J. Colbourn 65th birthday conference, Singapore
24. Athens Conference on Algorithms and Complexity, ACAC 2018, National Technical University of Athens, (NTUA), Athens, Greece, August 23-24, 2018, plenary invited speaker
25. 12th international conference on Automated Deduction in Geometry, ADG 2018, Nanning, China, September 11-14, 2018, plenary invited speaker
26. 13th international conference on Artificial Intelligence and Symbolic Computation, AISC 2018, Suzhou, China, September 16-19, 2018, invited tutorial speaker
27. CADGME 2020, Jerusalem, Israel, Keynote Speaker (moved to 2021)
28. ESCO 2020, Pilsen, Czech Republic, Keynote Speaker (moved on-line)
29. IEEE Computer Society Seminar, "Big Data and Combinatorics", invited by Dr. Ahmed Farouk, held on-line on: March 24, 2020
30. Summer School on Operations Research, Data and Decision Making May 19-20, 2020, Nizhny Novgorod, Russia, invited lecture

WINTER/SUMMER SCHOOLS, INTENSIVE TRAINING (8)

1. Instructor: Winter School, Beihang University, Beijing, China, December 2019
2. January 2018, Intensive Maple training event in Waterloo, Instructors: Jürgen Gerhard (Maplesoft), Ilias Kotsireas (Laurier), Erik Postma (Maplesoft)
3. Saturday, March 25, 2017, Intensive Maple training event at The Fields Institute in Toronto, Instructors: Jürgen Gerhard (Maplesoft), Ilias Kotsireas (Laurier), Erik Postma (Maplesoft)
4. Saturday, November 12, 2016, Intensive Maple training event at Wilfrid Laurier University, Waterloo campus, Instructors: Jürgen Gerhard (Maplesoft), Ilias Kotsireas (Laurier), Erik Postma (Maplesoft)
5. Instructor: Winter School, Intensive training in Data Mining, GXUN, Nanning, China
6. Instructor: Winter School, Intensive training in high-performance computing, School of Mathematical Sciences, South China Normal University, (SCNU) Guangzhou, China, December 14-25, 2015.
7. Instructor: Summer School, Intensive training in high-performance computing, GXUN, Nanning, China
8. Instructor: Summer School, Intensive training in high-performance computing, XNU, Henan, China

CONFERENCE PRESENTATIONS AND PARTICIPATION

1. Troisième Rencontre Mathématique Internationale, 28 Septembre - 2 Octobre 1989, Centre Culturel Européen de Delphes, Delphes, Grece
2. 1er Conseil de Grecs à l'Étranger, 1st Council of Greeks Abroad, (SAE), 4-5 Decembre 1995, Thessaloniki, Greece. (participant au forum Internet)
3. PoSSo Workshop On Software, March 1-4, 1995, Université Pierre et Marie Curie, Paris 6, Campus de Jussieu, Paris, France
4. AAEECC-11, July 17-22, 1995, Ancienne Ecole Polytechnique, Paris, France.
5. World Wide Web 5 (WWW5), May 6-10, 1996, CNIT, Paris La Defense, France. (participant presse)
6. Groupe de Travail, Equipe du Calcul Formel du Paris 6 31 mai 1996, Paris, France (TALK)
7. Journée sur l'enseignement du Calcul Formel, June 19, 1996, Université de Rennes I, Campus de Beaulieu, IRMAR, Rennes, France.
8. AAEECC-12, June 23-27, 1997, Université Paul Sabatier, Toulouse, France.
9. 33 Years of Gröbner Bases, (33YGB) February 2-4, 1998, RISC, Linz, Austria.
10. CASC 1998 April 22, 1998, EIMI Saint-Petersburg, Russia. (TALK)
11. Séminaire Mathématiques Effectives May 26, 1998, IGD, Université Claude Bernard Lyon-I, Lyon, France. (TALK)
12. Séminaire Calcul Formel May 28, 1998, LMC, IMAG, Grenoble, France. (TALK)
13. Séminaire Astronomie et Systèmes Dynamiques June 18, 1998, Bureau des Longitudes, Paris, France. (TALK)
14. MEGA-98 June 22-27, 1998, Université de Rennes I, St-Malo, France.
15. ACA 1998 August 9-11, 1998, Prague, Czech Republic. (TALK)
16. ISSAC 1998 August 13-15, 1998, University of Rostock, Rostock, Germany.
17. Journées Nationales de Calcul Formel 26-30 Octobre 1998, CIRM, Luminy, Marseille, France (TALK)
18. ALGORITHMES DE RESOLUTION DES SYSTEMES POLYNOMIAUX : APPLICATION AUX CONFIGURATIONS CENTRALES DU PROBLEME DES N CORPS EN MECANIQUE CELESTE. December 16, 1998, Ph. D. Thesis, Université Pierre et Marie Curie, Paris 6, Paris, France.
19. Séminaire Calcul Formel et Complexité February 5, 1999, IRMAR, Campus de Beaulieu, Université de Rennes I, Rennes, France. (TALK)
20. Ecole Jeunes Chercheurs en Algorithmique et Calcul Formel March 22-26, 1999, LaBRI, Université Bordeaux 1, Bordeaux, France. (TALK)
21. FRISCO (an Esprit-LTR European Commission Project) Closing Workshop April 28-29, 1999, NAG Corporation, Oxford, England. (TALK)
22. Groupe de travail de l'équipe Calcul formel May 19, 1999, LIFL, Université de Lille I, Lille, France. (TALK)
23. CASC 1999 May 31 - June 4, 1999, TUM, Munchen, Germany. (TALK)
24. IMACS-ACA'99 June 24-27, 1999, Madrid, Spain. (TALK), co-organizer of the session Computer Algebra for Dynamical Systems and Mechanics
25. PAUL ERDOS Memorial Conference July 4-11, 1999, Budapest, Hungary. (short communication, poster) Satellite conference of the UNESCO-ICSU World Conference on Science
26. Seminar in Symbolic Mathematical Computing October 8, 1999, UWO, CSD, London, Ontario, Canada. (TALK)
27. IBM CASCON November 8-11, 1999, Toronto, Canada. (ORCCA posters)

28. RISC-LINZ November 27-30, 1999, Linz, Austria.
29. ECCAD 2000 SONAD 2000 May 12-13, 2000, London, Ontario, Canada. (posters)
30. SCL/SCG/ORCCA joint lab meeting June 2, 2000, Waterloo, Ontario, Canada. (TALK)
31. MITACS Annual General Meeting The Legacy of John Charles Fields, The Fields Institute June 6-7, 2000, Toronto, Canada.
32. AMS Summer Research Conference in Symbolic Computation June 11-15, 2000, Mt Holyoke, MA, USA. (TALK)
33. MEGA-2000 June 20-24, 2000, Bath, England. (TALK)
34. ACA 2000 June 25-28, 2000, St. Petersburg, Russia. (TALK) Program Comm.
35. Classical Combinatorics FoataFest July 7-9, 2000, Temple University, Philadelphia, PA, USA.
36. AISC 2000 July 17-19, 2000, Madrid, Spain. (TALK)
37. SCL/SCG/ORCCA joint lab meeting October 6, 2000, Waterloo, Ontario, Canada. (TALK)
38. ECCAD 2001 May 5, 2001, Talahassee, FL, USA.
39. Large Class Teaching Workshop, Educational Development Office May 15-May 16, 2001, London, Ontario, Canada.
40. ACA 2001 Albuquerque, New Mexico
41. CAIMS 2001 Victoria, British Columbia, Canada
42. SONAD 2001 Waterloo, Ontario, Canada
43. Intensive Summer School in Computer Algebra, Kingston, Ontario
44. ISSAC 2001 London, Ontario, Canada.
45. ISAAC 2001 ZIB, Freie Universität, Berlin, Germany. (TALK)
46. ADCOG21, City University of Hong Kong, Hong Kong, China. (TALK)
47. Joint Mathematics Meetings, San Diego, CA. (TALK)
48. EAGER - EMS Summer School on Computational Algebraic Geometry and Applications Eilat, Israel, February 2002.
49. Mathematics Mechanization Research Center, MMRC Beijing, China, April, 2002. (TALK)
50. USTC Seminar on Geometric Computation Hefei, Anhui Province, China, April, 2002. (TALK)
51. TICAM, Center for Computational Visualization May 2002, Austin, TX
52. ECCAD 2002, LaGuardia Community College Saturday, May 18, 2002, Long Island City, NY, NY
53. CBMS Lectures, Texas A&M University: Solving Systems of Polynomial Equations May 20-24, 2002, College Station, TX
54. CBMS Lectures, Eastern Illinois University: N-Body Problem June 9-15, 2002, Charleston, IL, USA
55. ACA 2002 June 25-28, 2002, Volos, Greece
56. ISSAC 2002 July 7-10, 2002, Lille, France
57. FoCM 2002 August 8-11, 2002, Minneapolis, MN, USA
58. Midwest Dynamical Systems Seminar October 4-6, 2002, Cincinnati, OH, USA
59. LMCS 2002 October 20-22, 2002, RISC-Linz, Austria
60. UOA/NTUA Kounias conference June/July 2003
61. ACA 2003 July 2003, Raleigh NC, USA
62. ISSAC 2003 August 2003, Drexel, Philadelphia, USA
63. CASC 2003 October 2003, CASC 2003 Passau, Germany
64. DIMACS workshop Rutgers, NJ, USA, 2003
65. ASCM 2003 , 2003, Beijing, P. R. China

66. ICPSS 2004, November 24-26, 2004, Paris, France
67. ECCAD 2004, May 8, 2004, Waterloo ON, Canada
68. ICODOE 2005, May 13-15, 2005, Memphis TN, USA
69. HPCS 2005, May 15-18, 2005, Guelph ON, Canada
70. CMS/CSHPM Summer 2005 Meeting, June 4-6, 2005, Waterloo ON Canada
71. Maple Conference 2005, July 17-21, 2005, Waterloo ON, Canada
72. ACA 2005, July 31 - August 3, 2005, Nara, Japan
73. ACM SGB (SIG Governing Board) August 12-13, 2005, Newark, NJ, USA
74. Euroconference in Algebraic Combinatorics, August 20-26, 2005, Crete, Greece
75. CASC 2005, September 12-16, 2005, Kalamata, Greece
76. ASCM 2005, December 10-12, 2005, Seoul, Korea
77. Waterloo Computational Mathematics Colloquia Series, January 23, 2006
78. Rutgers Experimental Mathematics Seminar, February 2, 2006
79. Department of Mathematics and Statistics, Oakland University, Algebra Seminar, February 20, 2006
80. Waterloo Workshop on Computer Algebra 2006, April 10-12, 2006
81. Interactive Parallel Computation in Support of Research in Algebra, Geometry and Number Theory, January 29 to February 2, 2007, Mathematical Sciences Research Institute, MSRI, UC Berkeley, USA.
82. International Workshop on Hadamard and Cocyclic Matrices and Applications, IWHCMA 2007, June 18-19, 2007, Sevilla, Spain (TALK)
83. Guest Lecture in Doron Zeilberger's Experimental Mathematics class, Rutgers University, March 5, 2009
84. Rutgers Experimental Mathematics Seminar, March 5, 2009
85. International Conference on Design Theory and Applications, celebrating the 50th birthday of Dr Warwick de Launey, 2nd International Workshop on Hadamard and Cocyclic Matrices and Applications National University of Ireland, Galway, July 1-3, 2009 (TALK)
86. International Workshop on Hadamard Matrices and their Applications, In honour of the 60th birthday of Kathy Horadam, RMIT, Melbourne, Australia, November 2011 (TALK)
87. International Meeting to Celebrate the 60th Birthday of Jonathan Borwein. University of Newcastle, Australia, December 2011 (TALK)
88. University of Ioannina, Ioannina, Greece, September 2014 (TALK)
89. Caltech, Pasadena CA, USA, Department of Mathematics, September 2014 (TALK)
90. Conestoga College, Doon (Kitchener) Campus, October 2014 (TALK)
91. Jerusalem College of Technology, Jerusalem, Israel, June 2015 (TALK)
92. Gil Kalai 60th birthday conference, Hebrew University of Jerusalem, Israel

SEMINAR TALKS

1. Beihang University, Beijing, P. R. China, February 19, 2019
2. Chinese Academy of Sciences, Beijing, P. R. China, February 21, 2019
3. Algebra Seminar, McMaster University, Hamilton, ON, Canada, March 25, 2019

SPECIAL EVENTS TALKS

1. Laurier Data Science Society, November 21, 2019, "Do Billionaires Compute Eigenvalues?"
2. Google Waterloo, March 2017, "Do Billionaires Compute Eigenvalues?"
3. Wilfrid Laurier University, March 2016, "Do Billionaires Compute Eigenvalues?"

ADMINISTRATIVE AND COMMUNITY SERVICE

Department:

1. co-organizer: Department Seminar Series, <http://bohr.wlu.ca/seminars/>
 - with Li Wei and Marek Wartak, 2015-2016
 - with Paul McGrath and Marek Wartak, Winter 2015
2. PTAC Committee, 2010-2011, 2015-2016, Web page Committee, 2005, DAP Committee
3. Undergraduate Advisor, 2008-2009, 2009-2010, 2010-2011, 2013-2014

Faculty:

1. internal innovation grant selection committee, WLU Office of Research Services, 2019-2020
2. Research Round Table, September 2009, Laurier Research Office, Laurier Chongqing Office
3. Ontario Universities Fair, Toronto, Faculty of Science kiosk, 2005
4. Teachers Science Day 2005, Presentation Title: "Working with 200 computers simultaneously, high-performance computing demonstration", February 2005
5. co-founder (with Roderick Melnik) of the Laurier Seminar Series in Computational Science and Applied and Statistical Modelling (CSASM) 2004-2014, <http://www.mmcs.wlu.ca/csasm/>
6. Environment/occupational Health and Safety Committee, Emergency Warden, 2004-2005
7. Admissions Committee, 2006-2007

University:

1. Senate Promotion and Tenure Committee (SPAT), Alternate, September 1, 2017 – August 31st, 2019
2. Designing Effective Course Syllabi Workshop, Educational Development Team, Wilfrid Laurier University, November 2009
3. Student Awards Selection Committee, Faculty of Science, Wilfrid Laurier University, 2009-2010
4. Internal Grants Committee, Wilfrid Laurier University, September 1, 2009 - August 31, 2011
5. Senate Committee on Information Technology, SCIT, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010
6. Shared Hierarchical Academic Research Computing Network (SHARCnet) Site Leader for Wilfrid Laurier University, December 2005 – today
7. Shared Hierarchical Academic Research Computing Network (SHARCnet), Chair of the Site Leaders Committee, July 1, 2011 – June 30, 2012.

External:

1. Examination Committee Member for PhD thesis defense of Mr. Clément Laroche, April 30, 2020, “Compact and efficient implicit representations”, University of Athens, Greece
2. Examiner, Amal Alahmadi, MSc thesis, April 10, 2019 “Towards Secure and Fair IIoT-Enabled Supply Chain Management via Blockchain-based Smart Contracts”
3. Examination Committee Member for PhD thesis defense of Mrs Anna Karasoulou, University of Athens, Greece
4. Judge for a Correlation One www.correlation-one.com Datathon, September 29, 2018, University of Waterloo. First Prize: 20,000 USD, Second and Third Prizes: 2,500 USD each.
5. D2L (Desire2Learn) Usability Study, Fall 2014
6. Defense Committee Chair, Frederico Faria, PhD thesis, WLU, October 2014
7. Eastwood Collegiate Institute (ECI), Professional Development Day, April 19, 2013, Workshop Title: “Exploring Fractals”
8. SHARCNET Board of Directors, Researcher Representative, May 1, 2012 to April 30, 2013
9. External Examiner, Rui Hu, PhD thesis, University of Western Ontario, 2013
10. Reader, Ruitong Huang, MSc thesis, University of Waterloo, July 2010
11. Poster Committee, SHARCnet Research Day, York University, May 6, 2010
12. Poster Committee, SHARCnet Research Day, University of Waterloo, May 21, 2009
13. Committee chair, Sherry McGee, MSc thesis, Wilfrid Laurier University, September 2009
14. External Examiner, Wenqin Zhou, PhD thesis, University of Western Ontario, 2007
15. Wilfrid Laurier University Phi Club, “Maple, Visualization and Fractals”, November 2006
16. External Examiner, Brad Botting, MSc thesis, University of Waterloo, 2004
17. Promoting Women in Science, PROWIS 2003, Workshop Title: “The Fractal Geometry of Nature” May 2003
18. Promoting Women in Science, PROWIS 2002, Workshop Title: “Have fun with the computer while learning useful Mathematics” May 2002

Publications Summary (189)

Journal Papers (refereed)	74
Conference Papers (refereed)	47
Edited books (conference proceedings)	27
Journal Special Issues	25
Collections Edited	3
Chapters in Books/Handbooks	3
Books Authored	1
Technical Reports	9
Total:	189