Curriculum Vitae
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March 1, 2024

1 Appointments and Education

Since Apr. 2021	President and Director General, ATHENA Research and Innovation Center, Maroussi, Greece. Adjunct researcher (since 2012).
Since Sep. 2002	Professor (part-time since April 2021), and Associate Professor (until August 2007). Department of Informatics & Telecommunications, NKUA.
Since Oct. 1995	Institut National de Recherche en Informatique et en Automatique, Sophia-Antipolis, France. Tenured Researcher (1995-2002), On leave (2002-18), External collaborator (since Sep. 2018).
2017–2018	Expert contract (6-month), EU JRC Ispra (Italy), Finance & Economy Unit.
Spring 2017	Sabbatical leave. Visiting Researcher and Visiting Professor: ETH Zürich; Univ. Svizzera Italiana, Lugano; INRIA Sophia-Antipolis.
2009	Sabbatical leave. Visiting Researcher: Ecole Normale Supérieure de Paris, Ecole Centrale de Paris, INRIA Paris, Institut des Hautes Etudes Scientifiques, Université d'Evry, Université Paris-Dauphine / CNRS.
July - Aug. 2002	Visiting Researcher: Computer Science Dept. / Ontario Research Center in Computer Algebra, Western U., London, Canada.
Jan. - Dec. 2000	Visiting Associate Professor. Computer Science Dept, U. Crete, Greece.
Jan. 2000	Habilitation à Diriger des Recherches. Title: "Algebraic and geometric algorithms". Engineering School, University of Nice & Sophia-Antipolis, France.
October 1999	Visiting Researcher, Electro-Technical Lab, Tsukuba, Japan.
Jan. - Jul. 1995	Postdoctorate Fellow, HCM Program, EU. INRIA Sophia-Antipolis, France.
December 1994	Ph.D. in Computer Science, University of California at Berkeley. Thesis title: "Sparse Elimination and Applications in Kinematics." Committee: Professors J.F. Canny (adviser), K. Ribet, and R. Seidel.
May 1991	M.Sc. in Computer Science, UC Berkeley. Adviser: Prof. J.F. Canny.
June 1989	B.Sc.Eng. in Computer Science, Princeton U.; High Honors. Thesis Adviser: Prof. R.E. Tarjan.

2 Teaching Experience

NKUA, Department of Informatics & Telecoms, Associate professor and Professor

- Discrete Mathematics (1st year, Fall). 2002, 2004–08, 2016–2018.

- Algorithms and Complexity (2nd year, Spring). 2020–now.

- Mathematics for Computer Science (3rd year). 2008, 2010.

- Software development for hard algorithmic problems (4th year, Fall). 2014–now.

- Computational Geometry (4th year, Spring). 2002–08, 2010–12, 2014–16, 2018.

- Special Topics in Theoretical Informatics: Algorithms in structural molecular biology (4th year, Spring). 2005, 2008, 2010, 2015–16.

- Geometric Data Analysis (Grad). Spring 2019, Fall 2019.

- Computational Geometry (Grad, Spring). 2003, 2005–08, 2010–12, 2014–16, 2018.

- Computational Algebra (Grad, Fall). 2003, 2005–07, 2010–11, 2013–16, 2018.

- Algorithms in Structural Bioinformatics (Grad, Spring). 2004–06, 2008, 2010–12, 2014–now; jointly with MSc in Data Science & Information Technologies.

Greek Open University, Scientific collaborator
Foundations of Computer Science: Algorithms and Complexity (3rd year), 2005-06.

University of Crete, Department of Computer Science, Visiting Associate professor
– Data Structures (2nd year). Fall 2000.
– Discrete Mathematics (1st year). Spring 2000.
– Computational Geometry (Grad, half course). Spring 2000.
– Algebraic Algorithms (Grad, half course). Spring 1999.

University of Marseilles, Department of Mathematics. Visiting instructor
Computer Algebra (1/2 course), Spring 1998. MSc Discrete Math & Foundations of Computer Science.

University of Nice, Department of Mathematics. Visiting instructor
– Computer algebra and System solving (Grad, half course). Spring 1995–1997, 2001.
– Combinatorics and Probability (3rd year, classes). Fall 1997.
– Linear Algebra and Optimization for Physicists and Engineers (2nd year, classes). Spring 1997.

UC Berkeley, Department of EECS. Teaching assistant (1989-91)

3   Postdoctoral collaborators and Students

Postdoctoral/Research collaborators

E. Markou, 2004-06. I. Kotsireas, 2006-08. E. Tsigaridas, 2010. C. Konaxis, 2011, 2014-now. L. Peñaranda, 2011. T. Luu Ba, 2012. C. Fragoudakis, R. Vidunas, 2013-14. Y. Avrithis, 2015.

Doctoral students

1. Elias Tsigaridas (2/03–9/06). Algebraic algorithms and applications to geometry.

2. George Tzoumas (5/05-9/09). Computational geometry for curved objects and Voronoi diagrams in 2D

3. Christos Konaxis (8/05–6/10). Algebraic algorithms for system solving and applications to robotics.

4. Christos Syrseloudis (8/05–6/11). Efficient algorithms for the study, the design, and the kinematics of parallel robots, with applications to physiotherapy.

5. Tatjana Kalinka (9/09–6/13). Change of representation of rational curves and surfaces.

6. Vissarion Fisikopoulos (10/09–4/14). High-dimensional polytopes defined by oracles: algorithms, computations and applications.

7. Anna Karasoulou (10/11–6/17). Algebraic combinatorics and resultants for polynomial system solving.

8. Ioannis Psarros (5/15–6/19). Dimensionality reduction and Geometric search in general dimension.

9. Clément Laroche (10/16–4/20) Compact and efficient algebraic representations of geometric objects

10. Apostolis Chalkis (5/18–12/21). Sampling in high-dimensional convex regions.

11. Evangelos Bartzos (4/16–4/22). Distance graphs, rigidity theory and applications.

12. Emmanouil Christoforou (since 11/17). Unsupervised learning algorithms in geometry.

13. Carles Checa (since 11/20). Algebraic computing for geometric predicates.

14. Konstantinos Tertikas (since 11/20). Deep learning for representing, searching, generating 3D shapes

15. Efi Malesiou (since 3/22). Machine learning for robust personalized long-term therapeutical treatment.

16. Petros Stavropoulos (since 5/23). Reproducibility in science through information extraction from the scientific literature.

17. Panagiotis Rigas (since 11/23). Deep Geometric Learning with applications.

Master's and Bachelor's theses
– MSc, Dept Informatics & Telecoms, NKUA: 14 students.
– MSc in Algorithms, Logic, & Discrete Math: 14 students
– MSc in Bioinformatics: 13 students.
– MSc Computer Science Dept, U. Crete, Heraklio: One student.
– MSc U. Nice et Sophia-Antipolis: 4 students
– Supervised 35 students on their Bachelor's Thesis.

4 Research and Development Projects

Details on the Lab's webpage: `http://erga.di.uoa.gr`

2024–2027	Digital Finance. ITN (MSCA), HorizonEu. ATHENA is Associate partner.
2022-2025	AutoFair: Explainability and Fairness in AI, HorizonEurope. Consortium: CTU Prague; ATHENA, another 6 partners. Site leader.
2022-2025	DT4GS: Digital Twins for Green Shipping, HorizonEurope. Consortium: Inlecom; ATHENA, Danaos, another 11 partners. Site leader
2022–2024	Ranwalk: Random Walks for Fast, Geometry-agnostic IC modeling. Research-Create-Innovate (EPAnEK), Greek Ministry of Development. Consortium: ANSYS S.A.; ATHENA, U. Patras. Site leader.
2020–2024	IntelComp: A Competitive Intelligence Cloud/HPC Platform for AI-based STI Policy Making. H2020 e-Gov. Consortium: FECYT; ATHENA, HFRI, another 9 partners. Site leader of HFRI (ELIDEK) till 3/2021.
2020–2023	FinAI: Fintech and AI in Finance. H2020 Cost Network. Site leader of ATHENA.
2020–2021	PeGASUS: Probabilistic geometric algorithms & clustering applied to economics & finance. Young researchers, Greek Ministry of Development. 2 PhD theses at ATHENA, Coordinator
2019–2024	Learning, processing and optimising Shapes (GRAPES). Initial Training Network (MSCA), H2020. Consortium: ATHENA; U. Barcelona, INRIA, J. Kepler U., RWTH Aachen U., SINTEF, U. Strathclyde, U. Svizzera Italiana, U. Tor Vergata, Vilnius U., GeometryFactory SARL. Coordinator.
2019–2023	Inspired: Integrated Structural Biology, Drug Screening Efforts and Drug target functional characterisation. National Research Infrastructures. Consortium: NHRF; NKUA, another 8 institutions. Department Group leader.
2018–today	Technology transfer. – ANSYS (2020–2024) Geometric Computing for simulating Integrated Circuits and Electronics design automation. Industrial contract with ATHENA. – HSBC London (2023–2024) Routing optimization. Industrial contract with ATHENA. – EmDoT Ltd, Athens (2019–2021). Capacitated vehicle routing with time windows. NDA with Google Paris. Coodinating team of 9 researchers (ATHENA, NKUA, NTUA). – Meteorologica P.C., Athens (2018–today). Scientific computing, and Machine Learning for time-series forecasting of wind speed and wind energy production. Operational system for Terna Energy; NDA's with Ellaktor, Protergia, InAccess. Chief scientist. – Pythagoras Systems Ltd, Athens, and Volentix S.A., Montreal, Canada (2018–2019). AI in assessing digital assets. Online evaluation platform Vespucci. Chief scientist.
2017–2022	Learning and Analysing Massive/Big complex Data (LAMBDA). Research & Innovation Staff Exchange (MSCA), H2020. Consortium: NKUA; 3DShapes Ltd, AXA Assurances, U. Illinois Chicago, Stanford, UC Berkeley. Coordinator.

2016–2019	Algebraic Representations for Computer-Aided Design of complEx Shapes (ARCADES). Initial Training Network (MSCA), H2020. Consortium: ATHENA; U. Barcelona, INRIA, J. Kepler U., SINTEF, U. Strathclyde, TU Wien, Evolute GmbH. Coordinator.
2015–2016	CloudFlow: Electronic Design Automation – modeling of MEMS sensors on the cloud. Innovation for Manufacturing (ICT), FP7. Consortium: HELIC Inc.; ATHENA, ESS Ltd. Site leader.
2012–2015	ESPRESSO: Exploiting Structure in Polynomial Equation and System Solving with Applications to Geometric and Game Modeling. Aristeia (Excellence), Greek Ministry of Development. Coordinator.
2012–2015	Geometric computing and critical applications. Thales, Greek Ministry of Education. Consortium: NKUA; NTUA, Forth. Coordinator.
2010–2016	Advisor to OpenFund and OpenFund II, a start-up capital fund, focusing on high-technology companies in South-eastern Europe.
2010–2013	Computational Geometry Learning. FET-Open STREP (IST), FP7. Consortium: U. Jena; U. Groeningen, ETHZ, Freie U. Berlin, INRIA, U. Tel-Aviv. NKUA Site Leader.
2008–2012	Shapes, Geometry, and Algebra (SAGA). Initial Training Network (Marie Curie), FP7. Consortium: SINTEF; NKUA, INRIA, J.Kepler U., Kongsberg GmbH, Missler-Soft, GraphiTech, U. Oslo, U. Cantabria, Vilnius U. Site leader.
2003–2009	Algorithms and applications to geometric modelling, robotics, & structural bioinformatics. Kapodistrias, NKUA. Group leader (2009), Coordinator (2003–05).
2005–2008	Algorithms for Complex Shapes, with certified numerics (ACS). FET-Open STREP (IST), FP7. Consortium: U. Groeningen; ETH Zürich, Freie U. Berlin, MPI, GeometryFactory, INRIA, U. Tel-Aviv. NKUA site leader.
2005–2009	Efficient algorithms for parallel robots with applications to physiotherapy. PENED, Greek Ministry of Development. Partner: Reflexion Ltd. Coordinator.
2006–2008	Efficient algorithms and implementations for representing and handling curves and surfaces. ENTER, Greek Ministry of Development. Partner: MP & Assoc. Coordinator.
2005–2006	Arcadia: 3D arrangements. INRIA International Cooperation. Consortium: Loria Nancy, INRIA Sophia-Antipolis. NKUA site leader.
2004–2007	Geometric algorithms for curved objects & applications. Pythagoras, Ministry of Education. NKUA. Coordinator.

2004–2006	Calibration of space robots for earth observation. PLATON bilateral collaboration with INRIA Sophia-Antipolis. NKUA site leader.
2003–2007	Algebraic algorithms for system solving, structured matrices. Associate Team with Galaad, INRIA Sophia-Antipolis. NKUA site leader.
2001–2004	Effective Computational Geometry for Curves and Surfaces (ECG). FET-Open STREP (IST), FP6. Consortium: INRIA; ETHZ, Freie U. Berlin, MPI, U. Groeningen, U. Tel-Aviv. Member of INRIA.
2002–2003	Distance Geometry and Genomics. French government. Consortium: CNRS-Montpellier, INRA, Institut Pasteur (Paris). Member of INRIA.
2001–2003	Robust methods in algebraic system solving and applications to geometric modeling. Bilateral Project with U. Buenos Aires (ECOS-Sud). INRIA Site Leader.
2002	Surface implicitization and singularities (SIMPLES). Bilateral Project with INRA Avignon. INRIA funding. Coordinator.
2000–2001	Algebraic/numeric methods for solving sparse polynomial systems applied to economics, finance, game theory. Bilateral, City U. Hong-Kong (Procore). INRIA Site Leader
1998–1999	Symbolic-numeric methods for solving sparse systems of algebraic equations. Bilateral collaboration with U. Patras (PLATON). Member of INRIA.
1997–1999	Robust tools for numeric computation (FIABLE). INRIA network.
1996–1999	Framework for the Integration of Symbolic-Numeric Computing (FRISCO). ESPRIT Reactive LTR project 21.024. Member of INRIA Sophia-Antipolis.
1994–1995	Silma Corporation, San Jose, California. Consultant for robotics applications.

5 Professional Service and Distinctions (selected)

Citations   Hirsch's H-index = 40 (Google scholar).

Journal editor

- *Journal of Symbolic Computation*, Elsevier. Associate editor, since Aug. 2003.
- *Mathematics for Computer Science*, Springer-Birkhauser. Associate editor, since Jan. 2017.
- *Journal of Applicable Algebra in Engineering, Communication & Computing*, Springer. Associate editor, since Nov. 2020.

- *Theoretical Computer Science*, Guest co-editor (with B. Mourrain and V. Pan), Special Issue on Symbolic-Numeric Algorithms, published in 2004.
- *Computational Geometry: Theory & Applications*, Elsevier. Guest co-editor (with L. Palios), Special Issue on Europ. Workshop Comp. Geom. 2006, published in 2008.
- *Journal of Symbolic Computation*. Guest co-editor (with E. Schost), Special Issue on ISSAC 2011, published in 2013.

Chair

- Local arrangements chair. Computational Geometry Week 2024 and Symposium on Computational Geometry (SoCG) 2024, Athens, Greece.
- Program Committee Chair. Annual ACM International Symposium on Symbolic & Algebraic Computation (ISSAC) 2011, San Jose, California, USA.
- co-General Chair. Annual ACM International Symposium on Symbolic & Algebraic Computation (ISSAC) 2020, Kalamata, Greece, held online; with Lihong Zhi (Beijing).
- Tutorials chair. Annual ACM International Symposium on Symbolic & Algebraic Computation (ISSAC), 2008, Linz, Austria.
- Program co-chair, European Workshop Computat. Geometry, Delphi, Greece, 2006

Program Committee member

- Annual ACM Intern. Symposium on Symbolic & Algebraic Computation (ISSAC): 2001, 2007, 2012, 2014, 2017, 2021.
- Annual Intern. Symposium on Computational Geometry 2021.
- 20th European Symposium on Algorithms (ESA 2012), Algorithm Engineering Track, Ljubljana 2012.
- Annual ACM/SIAM Joint Conference on Geometric and Physical Modeling 2011 (Orlando), 2010 (Israel), 2009 (San Francisco), 2008 (New York).
- SIAM Conference on Applied Algebraic Geometry, Colorado 2013.
- International conference on Geometric Modeling and Processing, June 2010, Spain.
- Intern. Workshop Computer Algebra in Scientific Computing (CASC): 2005–2013.
- Annual Intern. IEEE Engineering in Medicine & Biology Conf., 2009, 2011, 2013
- Computer Graphics International (CGI) 2004,
- 40th European Workshop on Computational Geometry, Ioannina, Greece, 2023.
- Annual International Conference on Algebraic Informatics 2009, Greece.
- IEEE Conference on Bioinformatics and Bioengineering (BIBE) 2008, Greece.
- Workshop on Symbolic-Numeric Computation (SNC) 2005, 2007.
- International Mathematica Symposium, Avignon, France, 2006.

Boards

- Member of the Scientific Expert Panel for the Computation-based Science & Technology Research Center (CaSToRC) of the Cyprus Institute, Cyprus.
- Scientific Council member at HFRI: Hellenic Foundation of Research and Innovation (http://elidek.gr). Representing Informatics and Mathematics, 2018–2021.
- Advisory board. International conference on Effective Methods in Algebraic Geometry (MEGA), 2004–2019.

Service in the Department (selected)	2004, 2019. Exam committee member: International Olympiad of Informatics, Balkan Olympiad of Informatics.
	2004–today. Erasmus exchange, U. Nice, France. USI Lugano, Switzerland, to 2015
	2005–2020. Member, committee of MSc in Logic, Algorithms & Computation.
	2007–today. Member, MSc in Informatics technologies in Medicine and Biology.
	2010–2012, 2019–2020. Head of Division on Theoretical Computer Science.
	2010–today. Coordinator, bilateral agreement NKUA–INRIA Sophia-Antipolis (France); Greek contact, INRIA's International Internship program.
	2018–today. Coordinator, MSc in Data science and Information Technologies.
Distinctions	2010. Distinguished Paper Award, Annual ACM International Symposium on Symbolic & Algebraic Computation.
	2002. Distinguished Paper Award, Annual ACM International Symposium on Symbolic & Algebraic Computation.
	1995. TMR Postdoc fellowship award, European Commission (declined).
	1988–89. Elected to ΤΒΠ (engineering), ΣΧ (scientific), ΦΒΚ (academic)
	1985–89. Full tuition, room and board scholarship, Princeton University.
Refereeing	ERC program, H2020/FP7 FET program, FP7 Marie-Curie Individual Fellowships, COST program. Science Foundations: Austria, Cyprus, The Netherlands, Slovenia, Switzerland, USA, South Moravia. Greek Ministry of Education.
Journal referee	Algorithmica. Computational Geometry: Theory & Applications. Computer-Aided Design. Computer-Aided Geometric Design. Discrete and Computational Geometry. IEEE Trans. Graphics. IEEE Trans. Nanobioscience. IEEE Trans. Pattern Analysis & Machine Intelligence. IEEE Trans. Robotics. Information Proc. Letters. Intern. J. Computational Geometry & Applications. Intern. J. Control. Intern. J. Robotics Research. J. Algebraic Combinatorics. J. Algorithms. J. Applicable Algebra in Engineering, Communications & Computing. J. Complexity. J. Computational Geometry. J. Foundations of Computational Mathematics (FOCM). J. Symbolic Computation. Linear Algebra & Applications. Pattern Analysis & Applications. Robotica. SIAM J. Computing. SIAM J. Numerical Analysis. SIAM J. Scientific Computing. Theoretical Computer Science.
Conference referee	ACM Intern. Symp. Symbolic & Algebraic Computation (ISSAC). ACM Symp. Solid Modeling & Applications. ACM Symp. Theory of Computing (STOC). ACM-SIAM Symp. Discrete Algorithms (SODA). AMS-SIAM Conf. Applied Mathematics. Asian Symp. Computer Mathematics (ASCM). Canadian Conf. Computational Geometry. Computability in Europe: Logical Approaches to Computational Barriers. European Symp. Algorithms (ESA). IEEE Bioinformatics & BioEngineering (BIBE). IEEE Engineering in Medicine & Biology Conference. IEEE Foundations of Computer Science (FOCS). IEEE Intern. Symp. Computer-Aided Control Systems Design. Intern. Conf. Geometric Modeling & Processing (GMP). Intern. Colloq. Automata, Languages & Programming (ICALP). Intern. Symp. Algorithms & Computation (ISAAC). Intern. Symp. Effective Methods in Algebraic Geometry (MEGA). Intern. Symp. Theoretical Aspects of Computer Science (STACS). Symp. Geometric Processing. Robotics: Science & Systems. Workshop on Algorithm Engineering.

Conferences / Schools Organized	International Workshop on Symbolic-Numeric Algebra for Polynomials (SNAP), 7/96, INRIA Sophia-Antipolis; co-organizer.

Special session on Sparse Elimination Methods in Polynomial System Solving, AMS Spring Eastern Meeting, 4/98, Philadelphia, Pennsylvania; co-organizer.

CIMPA-Unesco School on Solving Systems of Polynomial Equations, Buenos-Aires. Co-organized with A. Dickenstein, July 2003.

2nd Latin-american School and Workshop on Polynomial Systems, 2/05, Angra dos Reis, Brazil, co-organizer.

International Workshop on Computer Algebra in Scientific Computing (CASC), 9/05, Kalamata, Greece, co-organizer.

European Workshop of Computational Geometry, 3/06, Delphi, Greece; co-organizer.

Global optimization: Integrating convexity, optimization, logic programming & computational algebraic geometry, Fall 2006, E. Schrödinger Institute, Vienna. Coordinator: A. Neumeier.

Institute of Mathematics and its Applications (IMA), Minneapolis. Special Year on Applications of Algebraic Geometry, 2006-07. Co-organized the Concentration and Workshop on Nonlinear Computational Geometry.

School on Shapes, Geometry, and Algebra (SAGA), October 2010, Kolympari, Greece.

Research Workshop on Computational Geometric Learning (CGL), 2013, Greece.

LAMBDA Project Kickoff workshop, June 2017, NKUA, Greece.

ARCADES Project Workshop and Midterm review, November 2017, Athens, Greece.

ACM ISSAC: International Symposium Symbolic & Algebraic Computation (co General Chair), July 2020, Kalamata, Greece.

GRAPES Project Software Workshop, February 2023, Athens, Greece.

CG-week and SoCG: Computational Geometry week and Symposium (Local organization Chair), June 2024, Athens, Greece.

6   Invited Talks (selected)

– AMS-MAA Joint Mathematics Meetings; January 1993.
– AMS-IMS-SIAM Conference on Continuous Algorithms & Complexity, Mt. Holyoke, USA; 6/1994
– International Geometric Software Workshop, The Geometry Center, Minneapolis; 1/1995.
– French Conference on Computational Geometry, Le Bessat, France, Plenary speaker; 3/1996.
– Intern. Workshop on Toeplitz matrices: structure, algorithms and applications, Cortona, Italy; 9/1996.
– Intern. Algebraic Conference in memory of D. Fadeev, St. Petersburg, Russia, Plenary speaker; 6/1997.
– Dagstuhl seminar on Symbolic-algebraic methods and Verification, Germany, 11/1999.
– AMS-IMS-SIAM Conf. Computer Algebra, Mt. Holyoke, Mass.; 6/2000
– Dagstuhl seminar on the Integration of geometric and algebraic software, Germany; 2001.
– Fields Institute Conf. Symbolic Computational Algebra, London, Ontario, Long-term invitation; 7/2002
– Conference on Foundations Of Computational Mathematics (FOCM), Minneapolis, USA; 8/2002.
– Spanish Conference on Computer Algebra (EACA), La Rioja, Spain, **Plenary speaker**; 9/2002.
– DIMACS workshop on the Implementation of geometric algorithms, New Jersey; 12/2002.
– Dagstuhl seminar on computational geometry, Germany; 2003.
– French Conference on Computational Geometry, Giens, France, **Plenary speaker**; 9/2003.
– Workshop on Geometry of NMR and structural molecular biology, McGill center, Barbados; 1/2005.
– Oberwolfach mini-workshop on Algebraic surfaces and syzygies, Oberwolfach; 11/2007.
– Athens Colloquium on Algorithms and Complexity; 8/2010.
– Conference of SIAM Group on Algebraic Geometry and Applications, Raleigh, USA; 10/2011.
– Workshop on Geometry and Applications, McGill center, Barbados; 2/2014.
– Dagstuhl seminar on Geometric modeling, Germany; 2014.
– Semester "Algebraic complexity", Simons Institute, UC Berkeley, Long-term invitation, Seminar; 2014
– Dagstuhl seminar on Computational Geometry, Germany; 2015.
– Workshop on Symbolic-Numeric Computation, Fields Institute, Toronto; 2015.
– ACM Intern. Symp. Symbolic & Algebraic Computation, Waterloo, Canada, **Plenary speaker**; 7/2016
– Finance & Economy Unit, EU Joint Research Center, Ispra, Italy; 10/2017 and 4/2019.
– Plekhanov Russian University of Economics, Moscow, Russia, Seminar Series; December 2017.
– J. Kepler Universität and J. Radon Institute (RICAM), Linz, Austria, Seminar Series; 4/2018.
– 2nd Intern. Workshop Geometry and Machine Learning, Symp. on Comp. Geometry, Budapest; 6/2018
– Symposium on Discrete Mathematics, German Math Society, Graz, Austria, **Plenary speaker**; 6/2018.
– COST School on Big Data Analysis, Thessaloniki, Greece, Invited speaker; Sept. 2018.
– KAUST, Visual computing center, Saudi Arabia; February 2019.
– SIAM Applied Algebraic Geometry meeting, Bern; Speaker, June 2019.
– Dagstuhl seminar on Computational Geometry, Germany, 5/2021.
– Workshop in honor of Prof. F. Winkler, *Algebraic & Differential Equation Solving* JKU Linz; July 2021.
– Conference on "Computer Algebra in Scientific Computing", Sochi, Russia, **Plenary speaker**; 9/2021.
– School in Algorithmic Data Science, Hausdorff Mathematics Center, U. Bonn; May 2022.
– Symposium of Greek Mathematicians, National Technical U. Athens, Greece; July 2022.
– Graph rigidity Workshop, Lancaster University, UK; April 2023; joint with E. Bartzos.
– L. Endrenyi's memorial meeting on Bioavailability and Bioequivalence, U. Athens, Greece; May 2023.
– Dagstuhl seminar on Computational geometry, Germany, May 2023.
– SIAM Conf. on Algebraic Geometry, Eindhoven, Holland; July 2023.
– Workshop on Online Algorithms, Learning and Games (Koutsoupias Fest), Athens; July 2023.
– Recent Trends in Computer Algebra, Institut Henri Poincar (IHP), Paris, France; October 2023.
– *The Cyprus Institute, Colloquim, Nicosia, Cyprus; November 2023.*
– *European Workshop in Computational Geometry, Ioannina, Greece,* **Plenary speaker***; 4/2024.*

7 Personal Information

Year / Place of Birth: 1966 / Athens, Greece.
Family Status: Married, two children.

8   Publications

(a) Book and Edited Volumes

[1] I.Z. Emiris, B. Mourrain, and V. Pan, editors. *Theoretical Computer Science. Spec. Issue on Algebraic & Numerical Algorithms*, volume 315(2-3):307–672. Elsevier, May 2004.

[2] A. Dickenstein and I.Z. Emiris, editors. *Solving Polynomial Equations: Foundations, Algorithms and Applications*, volume 14 of *Algorithms and Computation in Mathematics*. Springer-Verlag, Berlin, May 2005.

[3] I.Z. Emiris and L. Palios, editors. *Comput. Geometry: Theory & Applic. Spec. Issue on the 22nd European Workshop on Computational Geometry 2006*, volume 41. Elsevier, October 2008.

[4] I.Z. Emiris. *Computational geometry: A modern algorithmic approach.* Kleidarithmos, Athens, Greece, November 2008. In Greek.

[5] I.Z. Emiris, F. Sottile, and T. Theobald, editors. *Nonlinear computational geometry*, volume 151 of *I.M.A. volumes in Math & its Applications*. Springer, Berlin, October 2010.

[6] I.Z. Emiris and E. Schost, editors. *J. Symbolic Computation, Spec. Issue on Annual ACM Intern. Symp. on Symbolic and Algebraic Computation 2011*, volume 52. Elsevier, May 2013.

(b) Book Chapters

[1] I.Z. Emiris, A. Galligo, and H. Lombardi, Numerical univariate polynomial GCD. In *The Mathematics of Numerical Analysis*, volume 32 of *Lectures in Applied Math.*, pages 323–343. AMS, 1996.

[2] I.Z. Emiris. Symbolic-numeric algebra for polynomials. In A. Kent and J.G. Williams, editors, *Encyclopedia of Computer Science and Technology*, volume 39, pages 261–281. Marcel Dekker, New York, 1998.

[3] I.Z. Emiris and V.Y. Pan. Applications of FFT. In M.J. Atallah, editor, *Handbook of Algorithms and Theory of Computation*, chapter 17. CRC Press, Boca Raton, Florida, 1999. Revised chapter 18: Applications of FFT and Structured matrices, 2010 edition, eds M.J. Atallah and M. Blanton.

[4] A. Díaz, I.Z. Emiris, E. Kaltofen, and V.Y. Pan. Algebraic algorithms. In M.J. Atallah, editor, *Handbook of Algorithms and Theory of Computation*, chapter 16. CRC Press, Boca Raton, Florida, 1999. Revised chapter 17: Algebraic and Numeric Algorithms, 2009 edition, by I.Z. Emiris, V.Y. Pan and E. Tsigaridas, eds M.J. Atallah and M. Blanton. New revision to appear in 2014 edition, also CUNY TR-2012001 (http://tr.cs.gc.cuny.edu/tr).

[5] I.Z. Emiris. Matrix methods for solving algebraic systems. In G. Alefeld, J. Rohn, S. Rump, and T. Yamamoto, editors, *Symbolic Algebraic Methods and Verification Methods*, Springer Mathematics, pages 69–78. Springer-Verlag, Wien, 2001.

[6] I.Z. Emiris. Discrete geometry for algebraic elimination. In M. Joswig and N. Takayama, editors, *Algebra, Geometry, and Software Systems*, Mathematics and Visualization, pages 77–91. Springer-Verlag, Berlin, 2003.

[7] C. D'Andrea and I.Z. Emiris. Sparse resultant perturbations. In M. Joswig and N. Takayama, editors, *Algebra, Geometry, and Software Systems*, Mathematics and Visualization, pages 93–107. Springer-Verlag, Berlin, 2003.

[8] I.Z. Emiris. Sparse resultant and applications to geometric modelling. In A. Dickenstein and I.Z. Emiris, editors, *Solving Polynomial Equations: Foundations, Algorithms and Applications*, volume 14 of *Algorithms and Computation in Mathematics*. Springer-Verlag, Berlin, April 2005.

[9] I.Z. Emiris and I.S. Kotsireas. Implicitization exploiting sparseness. In R. Janardan, M. Smid, and D. Dutta, editors, *Geometric and Algorithmic Aspects of Computer-Aided Design and Manufacturing*, volume 67 of *DIMACS*, pages 281–298. AMS/DIMACS, 2005.

[10] I.Z. Emiris and E.P. Tsigaridas. Minkowski decomposition of convex lattice polygons. In *Algebraic geometry and geometric modeling*, Mathematics & Visualization, pages 217–236. Springer, 2005.

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