

CURRICULUM VITAE

of Panayiotis J. Psarrakos

Professor, National Technical University of Athens

Contact Address

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Personal

Date of birth: March 1970.
Place of birth: Piraeus, Greece.
Nationality: Greek.
Military service: January 1992 – April 1993.
Family status: Married, father of one child.

Research Interests

Theory of matrices and matrix functions. Numerical ranges and factorizations of matrices and matrix polynomials (theory and numerics). Spectral theory and canonical forms with applications in differential equations. Spectral perturbations, relative distance problems and pseudospectra of matrix polynomials. Stability of linear dynamical systems of higher order. Numerical linear algebra and construction-estimation of numerical ranges and pseudospectra. Analysis of nonnegative matrices and Perron-Frobenius theory.

Education

12/1997: PhD in Mathematics.
Institution: National Technical University of Athens, Department of Mathematics.
Supervisor: Professor John Maroulas.
Title: *Numerical Ranges of Matrix Polynomials and Applications.*

09/1991: Degree in Mathematics.
Institution: University of Athens, Department of Mathematics.

Scholarships

- 12/94–12/97: State Scholarships Foundation.**
Competed and awarded SSF grant as PhD student.
- 08/94–12/94: Department of Mathematics, National Technical University of Athens.**
Papakyriakopoulos scholarship as postgraduate student.
- 09/89–06/90: State Scholarships Foundation.**
Scholarship as undergraduate (3rd year) student.

Positions

- 03/15–present: Professor,** Department of Mathematics, National Technical University of Athens.
- 01/10–02/15: Associate Professor,** Department of Mathematics, National Technical University of Athens.
- 06/04–12/09: Assistant Professor,** Department of Mathematics, National Technical University of Athens.
- 02/01–05/04: Visiting Lecturer,** Department of Mathematics, National Technical University of Athens.
- 10/00–06/04: Visiting Lecturer,** School of Technological Applications, TEI Halkidas.
- 10/00–03/01: Visiting Lecturer,** Hellenic Air Force Technical NCO Academy.
- 01/00–08/00: Post-Doctoral Fellow,** University of Regina, Canada.
- 08/99–12/99: Post-Doctoral Fellow,** University of Calgary, Canada.
- 09/94–12/97: Teaching Assistant,** Department of Mathematics, National Technical University of Athens.

Research Visits (by invitation)

- 03/11–07/11: Washington State University, USA.**
- 07/03–08/03: University of Calgary, Canada.**
- 07/98–08/98: University of Regina, Canada.**

Teaching Experience

Nat. Tech. Univ. Athens: **Linear Algebra and Analytic Geometry**, winter semesters 2001–02–03–04–05–06–07–08–09–10–11–12–13–14–15.

Linear Algebra and Applications, spring semesters 2002–03–13–14–15.

Matrix Analysis and Applications, spring semesters 2012–13–14–15.

Calculus I (functions of one variable), winter semesters 2001–02–04–05–06–07–08–09–10–11–12.

Calculus II (functions of several variables), spring semesters 2001–02–03–04–05–06–07–08–09–10.

Postgraduate Matrix Analysis, spring semesters 2001–03–04–12–14–15, and winter semesters 2006–09.

TEI Halkidas: **Calculus I** (functions of one variable), winter and spring semesters 2000–01–02–03–04.

Calculus II (functions of several variables), winter and spring semesters 2000–01–02–03–04.

Linear Algebra, spring semester 2004.

HAF Tech. NCO Academy: **Mathematics**, winter semester 2000.

University of Regina: **Calculus II** (functions of one variable), spring semester 2000.

Nat. Tech. Univ. Athens: **Linear Algebra and Analytic Geometry**, tutorial, winter semesters 1994–95–96–97.

Calculus II (functions of several variables), tutorial, spring semester 1997.

Participation in Research Programs

Member of the research team of the program “*Study of Non-Selfadjoint Problems: Theory, Algorithms and Applications in Mathematical Physics and Engineering*”, EPEAEK II, *Pythagoras II*, 2005–2007.

Supervision of PhD Theses and Master Theses

- 03/14–present:** Vasiliki Panagakou, current PhD student.
- 03/13–present:** Christina Michailidou, current PhD student.
- 03/12–present:** Michael Rokidis, current PhD student.
- 05/07–03/11:** Christos Chorianopoulos, PhD Thesis titled *Birkhoff-James ϵ -Orthofonality Sets and Numerical Ranges*.
- 11/05–07/09:** Nikolaos Papathanasiou, PhD Thesis titled *Spectral Perturbations of Matrix Polynomials*.
- 06/10–03/11:** Christina Michailidou, Master Thesis titled *Eigenvalue Inclusion Regions*.
- 02/10–02/11:** Michael Rokidis, Master Thesis titled *Normality of Matrices and Relative Distances*.
- 04/09–12/09:** Marriana Kouneli, Master Thesis titled *Nonnegative Matrices*.
- 10/07–10/08:** Stefanos Samaras, Master Thesis titled *Matrix Polynomials and Applications*.
- 03/06–01/07:** Christos Chorianopoulos, Master Thesis titled *Numerical Range and Numerical Polynomial Hull of a Matrix*.

Administration – Committees (National Technical University of Athens)

- Department Head (Jan. 2013 – Oct. 2015), Department of Mathematics.
- Chair of the PhD Studies Committee (Sep. 2010 – Sep. 2015), Department of Mathematics.
- Member of the Qualifying Exam Committee for PhD students, Department of Mathematics.
- Member of the Committee on Graduate (Master) Program “Applied Mathematical Sciences”.
- Member of the Postgraduate Studies Committee, School of Applied Mathematical and Physical Sciences.
- Member of the Budget Committee, School of Applied Mathematical and Physical Sciences.
- Member of the Institutional Postgraduate Studies Committee, National Technical University of Athens.
- Member of the Institutional Scholarship Committee, National Technical University of Athens.
- Member of the Institutional Bequest Committee, National Technical University of Athens.

Editorship

- 10/10–present:** *Electronic Journal of Linear Algebra*, Associate Editor.
- 10/10–present:** *Electronic Journal of Linear Algebra*, Associate Managing Editor.
- 08/07–09/10:** *Electronic Journal of Linear Algebra*, Assistant Managing Editor.
- 01/13–12/14:** *Linear Algebra and its Applications*, Guest Editor.
Special Issue for the *18th Conference of the International Linear Algebra Society*, Rhode Island, Providence, USA (6/2013).
- 09/12–12/14:** *Journal of Applied Mathematics*, Guest Editor.
Special Issue titled *Advances in Matrices, Finite and Infinite, with Applications*, 2013.
Special Issue titled *Advances in Matrices, Finite and Infinite, with Applications*, 2014.

Refereeing

Linear Algebra and its Applications,
Electronic Journal of Linear Algebra,
SIAM Journal on Matrix Analysis and Applications,
Linear and Multilinear Algebra,
Operators and Matrices,
Numerical Linear Algebra with Applications,
Journal of Mathematical Analysis and Applications,
Integral Equations and Operator Theory,
Operator Theory: Advances and Applications,
Applied Mathematics Letters,
Applied Mathematics and Computation,
Mathematical and Computer Modelling,
Numerical Algorithms,
ACM Transactions on Mathematical Software,
IMA Journal of Mathematical Control and Information,
Central European Journal of Mathematics,
Journal of Optimization Theory and Applications,
Filomat, etc.

Reviewing

Reviewer of the *American Mathematical Society*, since 2000.

Peer Reviewed Journal Publications

- [J1] Panayiotis Psarrakos and Michael Tsatsomeros. On the geometry of the envelope of a matrix. *Applied Mathematics and Computation*, **244** (2014), 132–141.
- [J2] Christos Chorianopoulos and Panayiotis Psarrakos. On the continuity of Birkhoff-James ϵ -orthogonality sets. *Linear and Multilinear Algebra*, **61** (2013), 1447–1454.
- [J3] Panayiotis Psarrakos. Distance bounds for prescribed multiple eigenvalues of matrix polynomials. *Linear Algebra and its Applications*, **436** (2012), 4107–4119.
- [J4] Panayiotis Psarrakos and Michael Tsatsomeros. An envelope for the spectrum of a matrix. *Central European Journal of Mathematics*, **10** (2012), 292–302.
- [J5] Christos Chorianopoulos and Panayiotis Psarrakos. Birkhoff-James approximate orthogonality sets and numerical ranges. *Linear Algebra and its Applications*, **434** (2011), 2089–2108.
- [J6] Christos Chorianopoulos, Panayiotis Psarrakos and Frank Uhlig. A method for the inverse numerical range problem. *Electronic Journal of Linear Algebra*, **20** (2010), 198–206.
- [J7] Nikolaos Papathanasiou and Panayiotis Psarrakos. On condition numbers of polynomial eigenvalue problems. *Applied Mathematics and Computation*, **216** (2010), 1194–1205.
- [J8] Christos Chorianopoulos, Sotirios Karanasios and Panayiotis Psarrakos. A definition of numerical range of rectangular matrices. *Linear and Multilinear Algebra*, **57** (2009), 459–475.
- [J9] Stavros Fatouros and Panayiotis Psarrakos. An improved grid method for the computation of the pseudospectra of matrix polynomials. *Mathematical and Computer Modelling*, **49** (2009), 55–65.
- [J10] Nikolaos Papathanasiou and Panayiotis Psarrakos. Normal matrix polynomials with nonsingular leading coefficients. *Electronic Journal of Linear Algebra*, **17** (2008), 458–472.
- [J11] Nikolaos Papathanasiou and Panayiotis Psarrakos. The distance from a matrix polynomial to matrix polynomials with a prescribed multiple eigenvalue. *Linear Algebra and its Applications*, **429** (2008), 1453–1477.
- [J12] Lyonell Boulton, Peter Lancaster and Panayiotis Psarrakos. On pseudospectra of matrix polynomials and their boundaries. *Mathematics of Computation*, **77** (2008), 313–334.
- [J13] Panayiotis Psarrakos. A distance bound for pseudospectra of matrix polynomials. *Applied Mathematics Letters*, **20** (2007), 499–504.
- [J14] Panayiotis Psarrakos and Michael Tsatsomeros. Bounds for Lvinger’s function of nonnegative almost skew-symmetric matrices. *Linear Algebra and its Applications*, **416** (2006), 759–772.
- [J15] Mao-Ting Chien, Hiroshi Nakazato and Panayiotis Psarrakos. The q -numerical range and the Davis-Wielandt shell of reducible 3-by-3 matrices. *Linear and Multilinear Algebra*, **54** (2006), 79–112.
- [J16] Gregory Kalogeropoulos and Panayiotis Psarrakos. The polar decomposition of block companion matrices. *Computers and Mathematics with Applications*, **50** (2005), 529–537.

- [J17] Peter Lancaster and Panayiotis Psarrakos. On the pseudospectra of matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, **27** (2005), 115–129.
- [J18] Mao-Ting Chien, Hiroshi Nakazato and Panayiotis Psarrakos. On the q -numerical range of matrices and matrix polynomials. *Linear and Multilinear Algebra*, **53** (2005), 357–374.
- [J19] Gregory Kalogeropoulos and Panayiotis Psarrakos. On the solutions of homogeneous matrix difference equations. *Math. Comput. Sci. Math. Ser.*, **18** (2005), 51–58.
- [J20] Panayiotis Psarrakos and Charalampos Tsitouras. Numerical approximation of the boundary of numerical range of matrix polynomials. *Applied Numerical Analysis and Computational Mathematics*, **2** (2005), 126–133.
- [J21] Gregory Kalogeropoulos and Panayiotis Psarrakos. A note on the controllability of higher order dynamical systems. *Applied Mathematics Letters*, **17** (2004), 1375–1380.
- [J22] Panayiotis Psarrakos and Michael Tsatsomeris. A primer of Perron-Frobenius theory for matrix polynomials. *Linear Algebra and its Applications*, **393** (2004), 333–351.
- [J23] Gregory Kalogeropoulos, Panayiotis Psarrakos and Nickos Karcianas. On the computation of the Jordan canonical form of regular matrix polynomials. *Linear Algebra and its Applications*, **385** (2004), 117–130.
- [J24] Panayiotis Psarrakos. On the estimation of the q -numerical range of monic matrix polynomials. *Electronic Transactions on Numerical Analysis*, **17** (2004), 1–10.
- [J25] Maria Adam and Panayiotis Psarrakos. On a compression of normal matrix polynomials. *Linear and Multilinear Algebra*, **52** (2004), 251–263.
- [J26] Judith Mc Donald, Panayiotis Psarrakos and Michael Tsatsomeris. Almost skew-symmetric matrices. *Rocky Mountain Journal of Mathematics*, **34** (2004), 269–288.
- [J27] Panayiotis Psarrakos. Definite triples of Hermitian matrices and matrix polynomials. *Journal of Computational and Applied Mathematics*, **151** (2003), 39–58.
- [J28] Panayiotis Psarrakos and Michael Tsatsomeris. The Perron eigenspace of nonnegative almost skew-symmetric matrices and Levinger’s transformation. *Linear Algebra and its Applications*, **360** (2003), 43–57.
- [J29] Panayiotis Psarrakos. On the m -th roots of a complex matrix. *Electronic Journal of Linear Algebra*, **9** (2002), 32–41.
- [J30] Panayiotis Psarrakos and Michael Tsatsomeris. On the stability radius of matrix polynomials. *Linear and Multilinear Algebra*, **50** (2002), 151–165.
- [J31] Maria Adam, John Maroulas and Panayiotis Psarrakos. On the numerical range of rational matrix functions. *Linear and Multilinear Algebra*, **50** (2002), 75–89.
- [J32] Peter Lancaster, Alexander Markus and Panayiotis Psarrakos. Repeated eigenvectors and the numerical range of self-adjoint quadratic operator polynomials. *Integral Equations and Operator Theory, Birkhauser*, **44** (2002), 243–253.
- [J33] John Maroulas, Panayiotis Psarrakos and Michael Tsatsomeris. Perron-Frobenius type results on the numerical range. *Linear Algebra and its Applications*, **348** (2002), 49–62.

- [J34] Mao-Ting Chien, Hiroshi Nakazato and Panayiotis Psarrakos. Point equation of the boundary of numerical range of a matrix polynomial. *Linear Algebra and its Applications*, **347** (2002), 205–217.
- [J35] Douglas Farenick and Panayiotis Psarrakos. A triangle inequality in Hilbert modules over matrix algebras. *Linear Algebra and its Applications*, **341** (2002), 57–67.
- [J36] Peter Lancaster and Panayiotis Psarrakos. The numerical range of self-adjoint quadratic matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, **23** (2001), 615–631.
- [J37] Panayiotis Psarrakos. A note on the level sets of a matrix polynomial and its numerical range. *Operator Theory: Advances and Applications*, *Birkhauser*, **130** (2001), 277–281.
- [J38] Hiroshi Nakazato and Panayiotis Psarrakos. On the shape of numerical range of matrix polynomials. *Linear Algebra and its Applications*, **338** (2001), 105–123.
- [J39] Peter Lancaster and Panayiotis Psarrakos. Normal and seminormal eigenvalues of matrix functions. *Integral Equations and Operator Theory*, *Birkhauser*, **41** (2001), 331–342.
- [J40] Steve Kirkland, Panayiotis Psarrakos and Michael Tsatsomeros. On the location of the spectrum of hypertournament matrices. *Linear Algebra and its Applications*, **323** (2001), 37–49.
- [J41] Panayiotis Psarrakos. The q -numerical range of matrix polynomials, II. *Bulletin of Greek Mathematical Society*, **45** (2001), 3–15.
- [J42] Panayiotis Psarrakos. Numerical range of linear pencils. *Linear Algebra and its Applications*, **317** (2000), 127–142.
- [J43] John Maroulas, Panayiotis Psarrakos and Michael Tsatsomeros. Separable characteristic polynomials of pencils and property L . *Electronic Journal of Linear Algebra*, **7** (2000), 182–190.
- [J44] Panayiotis Psarrakos and Panayiotis Vlamos. The q -numerical range of matrix polynomials. *Linear and Multilinear Algebra*, **47** (2000), 1–9.
- [J45] Panayiotis Psarrakos and Michael Tsatsomeros. On the relation between the numerical range and the joint numerical range of matrix polynomials. *Electronic Journal of Linear Algebra*, **6** (2000), 20–30.
- [J46] John Maroulas and Panayiotis Psarrakos. On factorization of matrix polynomials. *Linear Algebra and its Applications*, **304** (2000), 131–139.
- [J47] John Maroulas and Panayiotis Psarrakos. Numerical range of matrix polynomials. *Bulletin of Greek Mathematical Society*, **42** (1999), 59–80.
- [J48] Alexander Markus, John Maroulas and Panayiotis Psarrakos. Spectral properties of a matrix polynomial connected with a component of its numerical range. *Operator Theory: Advances and Applications*, *Birkhauser*, **106** (1998), 305–308.
- [J49] John Maroulas and Panayiotis Psarrakos. On the connectedness of numerical range of matrix polynomials. *Linear Algebra and its Applications*, **280** (1998), 97–108.
- [J50] John Maroulas and Panayiotis Psarrakos. A connection between numerical ranges of selfadjoint matrix polynomials. *Linear and Multilinear Algebra*, **44** (1998), 327–340.
- [J51] John Maroulas and Panayiotis Psarrakos. The boundary of numerical range of matrix polynomials. *Linear Algebra and its Applications*, **267** (1997), 101–111.
- [J52] John Maroulas and Panayiotis Psarrakos. Geometrical properties of numerical range of matrix polynomials. *Computers and Mathematics with Applications*, **31** (1996), 41–47.

Publications in Refereed Monographic Series

- [M1] Miltiadis Karamanlis and Panayiotis J. Psarrakos. Birkhoff-James ϵ -orthogonality sets in normed linear spaces. *Textos de Matematica*, University of Coimbra, **44** (2013), 81–92.

Other Contributions

- [A1] Efstratios Rappos, Panayiotis Psarrakos and Panayiotis Vlamos. Book titled *Number Theory* (in Greek, 264 + xi pages). Publications of the *Greek Mathematical Society*, Athens, 2000.
- [A2] Panayiotis J. Psarrakos Lecture Notes titled *Topics in Matrix Analysis* (in Greek, 151 + vi pages). Publications of the National Technical University of Athens, 2012.
- [A3] Peter Lancaster and Panayiotis Psarrakos. A note on weak and strong linearizations of regular matrix polynomials. *Numerical Analysis Report No 2006.72*, Manchester Centre for Computational Mathematics, University of Manchester, 2006.
- [A4] Panayiotis Psarrakos and Michael Tsatsomeros. Numerical range: (in) a matrix nutshell, Parts 1 / 2. *Mathematical Notes from Washington State University*, **45** (2002) / **46** (2003).
- [A5] Panayiotis J. Psarrakos. Factorization of matrix polynomials (in Greek). *Mathimatiki Epitheorisi*, Greek Mathematical Society, **55** (2001), 112–126.
- [A6] A. Economou, E. Rappos, P. Psarrakos, E. Vlamou and P. Vlamos. Partitions of integer numbers in international mathematical olympiads (in Greek). *Mathimatiki Epitheorisi*, Greek Mathematical Society, **51** (1999), 113–129.

Presentations in Seminars

Washington State University, USA (04/2011).

University of Wyoming, USA (05/2011).

University of Calgary, Canada (08/1998, 09/1999, 05/2000, 07/2003, 08/2003, 06/2011).

University of Regina, Canada (08/1998, 04/2000, 05/2000).

University of Victoria, Canada (07/1998).

University of Athens, Department of Mathematics (06/2002).

National Technical University, Department of Mathematics (02/2001, 05/2003).

University of Aegean, Department of Mathematics (11/2000).

Organizing of Conferences, Workshops and Special Sessions

06/2013: 18th Conference of the International Linear Algebra Society, Rhode Island, Providence, USA.

07/2008: Special session titled *Matrix Polynomials and Related Problems*, 19th International Workshop on Operator Theory and its Applications, College of William and Mary, Williamsburg, USA.

05/2008: 8th Panhellenic Conference in Algebra and Number Theory, National Technical University of Athens, Greece.

06/2001: Special session titled *Matrix Functions*, 9th Conference of the International Linear Algebra Society, Technion-Israel Institute of Technology, Haifa, Israel.

06/2000: 5th Workshop on Numerical Ranges and Numerical Radii, Nafplio, Greece.

09/1996: 1st Panhellenic Conference in Algebra, University of Athens, Greece.

Presentations in Conferences

- 09/2015:** MASSEE International Congress on Mathematics, Athens, Greece.
Title: *Birkhoff-James approximate orthogonality sets.*
- 07/2015:** Applications of Computer Algebra (ACA 2015), Kalamata, Greece.
Title: *Travelling from matrices to matrix polynomials.*
- 07/2015:** 25th International Workshop on Operator Theory and its Applications (IWOTA 2015), Tbilisi, Georgia.
Title: *Birkhoff-James approximate orthogonality sets.*
- 08/2014:** 19th Conference of the International Linear Algebra Society, Seoul, Korea.
Invited talk (with partial support).
Title: *Travelling from matrices to matrix polynomials.*
- 06/2013:** 18th Conference of the International Linear Algebra Society, Rhode Island, Providence, USA.
Title: *On the spectrum envelope of a matrix.*
- 11/2012:** 2012 Haifa Matrix Theory Conference, Technion-Israel Institute of Technology, Haifa, Israel.
Invited talk (with partial support).
Title: *Birkhoff-James ϵ -orthogonality sets and numerical ranges.*
- 09/2012:** Conference in Numerical Analysis (NumAn 2012), Recent Approaches to Numerical Analysis: Theory, Methods and Applications, University of Ioannina, Greece.
Title: *An envelope for the spectrum of a matrix.*
- 06/2012:** 2012 SIAM Conference on Applied Linear Algebra. Universitat Politècnica de Valencia, Spain.
Title: *Applications of SVD to perturbation theory of eigenvalues of matrix polynomials.*
- 06/2012:** Workshop on Linear Algebra and its Applications to Financial Engineering, Institute for Financial and Actuarial Mathematics, University of Liverpool, UK.
Invited talk (with full support).
Title: *Distance bounds for prescribed multiple eigenvalues of matrix polynomials.*
- 09/2010:** Conference in Numerical Analysis (NumAn 2010), Recent Approaches to Numerical Analysis: Theory, Methods and Applications, Technical University of Crete, Chania, Greece.
Title: *A simple algorithm for an inverse numerical range problem.*
- 06/2010:** 16th Conference of the International Linear Algebra Society, University of Pisa, Italy.
Title: *The distance from a matrix polynomial to a prescribed multiple eigenvalue.*
- 05/2010:** Applied Linear Algebra (ALA 2010) - In honor of Hans Schneider, University of Novi Sad, Serbia.
Title: *A numerical range of rectangular matrices and matrix polynomials.*
- 09/2008:** Conference in Numerical Analysis (NumAn 2008), Recent Approaches to Numerical Analysis: Theory, Methods and Applications, Kalamata, Greece.
Title: *On the numerical estimation of pseudospectra of matrix polynomials.*

- 07/2008:** 19th International Workshop on Operator Theory and its Applications (IWOTA 2008), College of William and Mary, Williamsburg, USA.
Title: *Normal matrix polynomials.*
- 07/2008:** 9th Workshop on Numerical Ranges and Numerical Radii, College of William and Mary, Williamsburg, USA.
Title: *A definition of numerical range based on the Birkhoff-James orthogonality.*
- 05/2008:** 8th Panhellenic Conference in Algebra and Number Theory, National Technical University of Athens, Greece.
Title: *Normal matrix polynomials.*
- 05/2008:** 12th Panhellenic Conference in Mathematical Analysis, University of Athens, Greece.
Title: *Pseudospectra of matrix polynomials and their boundaries.*
- 09/2007:** Conference in Numerical Analysis (NumAn 2007), Recent Approaches to Numerical Analysis: Theory, Methods and Applications, Kalamata, Greece.
Title: *The distance from a matrix polynomial to matrix polynomials with a prescribed multiple eigenvalue.*
- 07/2006:** Joint GAMM-SIAM Conference on Applied Linear Algebra, University of Dusseldorf, Germany.
Title: *Pseudospectra of matrix polynomials and their boundaries.*
- 07/2006:** 13th Conference of the International Linear Algebra Society, Vrije University of Amsterdam, The Netherlands.
Title: *Bounds for Levinger's function of nonnegative almost skew-symmetric matrices.*
- 12/2004:** Workshop on Pseudospectra and Structural Dynamics, Laboratory for Advanced Dynamic Engineering, University of Bristol, UK.
Invited talk (with full support).
Title: *On pseudospectra of matrix polynomials.*
- 10/2004:** 10th Panhellenic Conference in Mathematical Analysis, National Technical University of Athens, Greece.
Title: *Pseudospectra of polynomial eigenvalue problems.*
- 09/2004:** International Conference of Numerical Analysis and Applied Mathematics 2004, TEI Halkidas.
Title: *Numerical approximation of the boundary of numerical range of matrix polynomials.*
- 07/2004:** 11th Conference of the International Linear Algebra Society, University of Coimbra, Portugal.
Title: *On the pseudospectra of matrix polynomials.*
- 07/2004:** 7th Workshop on Numerical Ranges and Numerical Radii, University of Coimbra, Portugal.
Title: *Numerical approximation of the numerical range of matrix polynomials.*
- 05/2004:** International Conference of Influence of Traditional Mathematics and Mechanics on Modern Science and Technology, Messini, Greece.
Title: *On the Jordan canonical form of regular matrix polynomials.*
- 07/2003:** International Conference in Recent Advances in Statistical Design and Related Combinatorics, University of Athens, Greece.
Title: *On the location of the spectrum of generalized tournament matrices.*
- 10/2002:** 9th Panhellenic Conference in Mathematical Analysis, Technical University of Crete, Chania, Greece.
Title: *On the Jordan canonical form of matrix polynomials.*

- 05/2002:** 4th Panhellenic Conference in Algebra and Number Theory, University of Patras, Greece.
Title: *On the m -th roots of a complex matrix.*
- 06/2001:** 9th Conference of the International Linear Algebra Society, Technion-Israel Institute of Technology, Haifa, Israel.
Title: *Numerical range of linear pencils.*
- 06/2001:** Special session in *Matrix Functions*, 9th Conference of the International Linear Algebra Society, Technion-Israel Institute of Technology, Haifa, Israel.
Title: *On numerical range of matrix polynomials.*
- 08/2000:** International Conference in Mathematical Analysis and Its Applications, National Technical University of Athens, Greece.
Title: *Numerical range of selfadjoint quadratic matrix polynomials.*
- 06/2000:** 5th Workshop on Numerical Ranges and Numerical Radii, Nafplio, Greece.
Title: *Numerical range of matrix polynomials and joint numerical range.*
- 05/2000:** 5th Western Canada Linear Algebra Meeting, University of Winnipeg, Canada.
Title: *Seminormal eigenvalues of matrix functions and numerical range.*
- 09/1999:** International Workshop on Analysis of Vibrating Systems, Canmore, Canada.
Title: *The boundary of the numerical range of selfadjoint quadratic matrix polynomials.*
- 07/1999:** 8th Conference of the International Linear Algebra Society, Escola Tècn. Superior d'Eng. Industrials, Barcelona, Spain.
Title: *On factorization of matrix polynomials.*
- 07/1998:** 4th Western Canada Linear Algebra Meeting, University of Victoria, Canada.
Title: *The boundary of numerical range of matrix polynomials.*
- 06/1998:** 2nd Panhellenic Conference in Algebra and Number Theory, University of Thessaloniki, Greece.
Title: *On the connected components of numerical range of matrix polynomials.*
- 09/1996:** 1st Panhellenic Conference in Algebra, University of Athens, Greece.
Title: *On the geometry of numerical range of matrix polynomials.*

Non-self Citations

More than **400** non-self citations, according to *Scholar Google* (see personal profile in <http://scholar.google.com/citations?user=2MxWQ0kAAAAJ>).

Scholar Google h-index: 15.

Scopus h-index: 10.