

**CURRICULUM VITAE**  
of  
**Maria C. Adam**

**Current Position / Contact Info**

Assistant Professor  
Department of Computer Science and Biomedical Informatics  
University of Thessaly  
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**Research Interests**

- Numerical ranges (matrix and matrix polynomials)
- Spectral analysis
- Numerical Linear Algebra
- Matrix Theory and applications to Systems Theory, Algorithms, Graphs, Statistics and Biostatistics

**Education**

- 1997-2001** : Phd in Mathematics, at the Department of Applied Mathematics and Physics of the National Technical University of Athens, Greece.  
Title of Thesis: Numerical range of matrices of special form.  
<http://thesis.ekt.gr/thesisBookReader/id/12477#page/88/mode/2up>  
Supervisor: Professor John Maroulas.
- 1985-1989** : B.Sc. in Mathematics at the Department of Mathematics of the University of Athens, Greece.

**Experience**

**Teaching Experience**

- 6/2013 – to date**: Assistant Professor, Department of Computer Science and Biomedical Informatics, University of Thessaly.
- 9/2009 – 6/2013**: Assistant Professor, Department of Computer Science and Biomedical Informatics, University of Central Greece.

### **Teaching Courses:**

- Linear Algebra, Mathematical Analysis I, [First Semester]
- Mathematical Analysis II, Discrete Mathematics, [Second Semester]
- Applied Mathematics [6<sup>th</sup> Semester]

**10/2004 - 7/2009:** Visiting Assistant Professor, Department of Computer Science and Biomedical Informatics, University of Central Greece.

**Teaching Courses:** Linear Algebra, [First Semester],  
Discrete Mathematics, [Second Semester]

**3/2006 - 7/2009:** Visiting Assistant Professor, Department of Regional Economic Development, University of Central Greece.

**Teaching Courses:** Mathematics I [First Semester], Mathematics II [Second Semester]

**1/2005 - 8/2005:** Visiting Lecturer, School of Mechanical Engineering, National Technical University of Athens, Greece.

**Teaching Course:** Mathematical Analysis II [Second Semester]

**2/2002 - 8/2002:** Visiting Lecturer, Department of International and European Studies, University of Piraeus, Greece.

**Teaching Course:** Algebra [Second Semester]

**10/2001 - 8/2010:** Visiting Lecturer, Department of Mathematics and Applied Mechanics, Hellenic Army Academy, Greece.

**Teaching Courses:** Mathematics I & II, Different Equations

**10/2002 - present:** Visiting Lecturer, Department of Computer Science, Mathematics for Informatics I (PLI12), Hellenic Open University, Greece.

**10/2002 - 6/2005:** Visiting Lecturer, Department of Applied Informatics in Management and Finance, Technological Educational Institute of Messologion, Greece.

**Teaching Courses:** Mathematics I, Mathematics II, Statistics I, Statistics II

**10/2005 - 6/2009:** Visiting Lecturer, Department of Informatics, Technological Educational Institute of Lamia Tech. Educational Institute of Lamia, Greece.

**Teaching Courses:** Linear Systems & Linear transformations, Linear Algebra, Discrete Mathematics

### **Research Projects**

**March 2014 – October 2015:** *Aristeia II*, Member of the research team of the University of Thessaly, Greece. Project: “IntDaMuS: Integration of Data from Multiple Sources”

**2005 – 2006:** *Pythagoras II*, Member of the research team of the National Technical University of Athens, Greece.

**2002 – 2003:** *Thalis 2002*, Member of the research team of the National

2000 – 2001: Technical University of Athens, Greece.  
*Archimides 2000*, Member of the research team of the National  
Technical University of Athens, Greece.

## **Publications**

### **Refereed journal publications**

1. M. Adam and N. Assimakis, *k-step Fibonacci sequence and Fibonacci matrices*, Journal of Discrete Mathematical Sciences & Cryptography, (October, 2015), to appear.
2. P. Bagos and M. Adam, *On the covariance of regression coefficients*, Open Journal of Statistics (OJS), (October, 2015), to appear.
3. N. Assimakis and M. Adam, *Mobile position tracking in three dimensions using Kalman and Lainiotis filters*, The Open Mathematics Journal, v. 8, (2015), 1-6, doi: 10.2174/1874117701508010001.
4. M. Adam, N. Assimakis and A. Farina, *Golden section, Fibonacci sequence and the time invariant Kalman and Lainiotis filters*, Applied Mathematics and Computation, v. 250, iss. 3, (2015), 817-831, doi: 10.1016/j.amc.2014.11.022.
5. M. Adam and N. Assimakis, *Nonrecursive solution for the discrete algebraic Riccati equation and  $X + A^* X^{-1} A = L$* , Open Mathematics, v. 13, iss. 1, (2015), 51-63, doi: 10.1515/math-2015-0006.
6. N. Assimakis and M. Adam, *Inversion Free Algorithms for Computing the Principal Square Root of a Matrix*, International Journal of Mathematics and Mathematical Sciences v. 2014, Article ID 613840, (2014), 8 pages, <http://dx.doi.org/10.1155/2014/613840>.
7. N. Assimakis and M. Adam, *Iterative and algebraic algorithms for the computation of the steady state Kalman filter gain*, ISRN Applied Mathematics, International Scholarly Research Notices, v. 2014, Article ID 417623, (2014), 10 pages, <http://dx.doi.org/10.1155/2014/417623>
8. N. Assimakis and M. Adam, *Global Systems for Mobile Position Tracking Using Kalman and Lainiotis Filters*, The Scientific World Journal, v. 2014, Article ID 130512, (2014), 8 pages, <http://dx.doi.org/10.1155/2014/130512>

9. M. Adam and N. Assimakis, *k-step sum and m-step gap Fibonacci sequence*, ISRN Discrete Mathematics, International Scholarly Research Notices, v. 2014, Article ID 374902, (2014), 7 pages <http://dx.doi.org/10.1155/2014/374902>.
10. N. Assimakis and M. Adam, *Kalman Filter Riccati Equation for the Prediction, Estimation and Smoothing Error Covariance Matrices*, ISRN Computational Mathematics, International Scholarly Research Notices, v. 2013, Article ID 249594, (2013), 7 pages, <http://dx.doi.org/10.1155/2013/249594>.
11. N. Assimakis and M. Adam, *Modified Riccati Equation emanating from Lainiotis Filter*, International Journal of Information Engineering (IJIE), v. 3, iss. 1, (2013), 25-29.
12. N. Assimakis, M. Adam and C. Triantafillou, *Lainiotis filter, golden section and Fibonacci sequence*, Signal Processing, v. 93, iss. 4, (2013), 721-730.
13. N. Assimakis, M. Adam, M. Koziri, S. Voliotis and K. Asimakis, *Optimal decentralized Kalman filter and Lainiotis filter*, Digital Signal Processing, v. 23, iss. 1, (2013), 442-452, doi: 10.1016/j.dsp.2012.08.005.
14. N. Assimakis and M. Adam, *On the Convergence of the Modified Riccati Equation*, ISRN Signal Processing, v. 2012, Article ID 625897, (2012), 5 pages, doi:10.5402/2012/625897.
15. N. Assimakis, M. Adam and A. Douladiris, *Information Filter and Kalman Filter Comparison: Selection of the Faster Filter*, International Journal of Information Engineering (IJIE), v. 2, iss. 1, (2012), 1-5.
16. M. Adam, *On the positive definite solutions of the matrix equation  $X^s + A^* X^{-s} A = Q$* , The Open Applied Mathematics Journal, v. 5, (2011), 19-25.
17. M. Adam, N. Assimakis and G. Fotopoulou, *On the Hermitian solutions of the matrix equation  $X^s + A^* X^{-s} A = Q$* , Journal of Applied Mathematics and Bioinformatics, v. 1, iss. 2, (2011), 109-129.
18. N. Assimakis and M. Adam, *Lainiotis filter implementation via Chandrasekhar type algorithm*, Journal of Computations and Modelling, v. 1, iss. 1, (2011), 115-130.
19. M. Adam, *On numerical ranges of the compressions of normal matrices*, Applied Mathematics and Computation, v. 217, iss. 9, (2011), 4699-4709, doi: 10.1016/j.amc.2010.11.023.

20. A. Koulis, C. Beneki, M. Adam and C. Botsaris, *An Assessment of the Performance of Greek Mutual Equity Funds: Selectivity and Market Timing*, Applied Mathematical Sciences, v. 5, iss. 4, (2011), 159-171.
21. N. Assimakis and M. Adam, *A new author's productivity index: p-index*, Scientometrics, v. 85, iss. 2, (2010), 415-427, doi: 10.1007/s11192-010-0255-z.
22. M. Adam and J. Maroulas, *The generalized Levinger transformation*, Journal of Computational and Applied Mathematics, v. 233, iss. 11, (2010), 3018-3029.
23. M. Adam and J. Maroulas, *Limited approximation of numerical range of normal matrix*, Operators and Matrices, v. 4, iss. 1, (2010), 139-149.
24. M. Adam, N. Assimakis, G. Tziallas and F. Sanida, *Riccati Equation Solution Method for the Computation of the Solutions of  $X + A^T X^{-1} A = Q$  and  $X - A^T X^{-1} A = Q$* , The Open Applied Informatics Journal, v. 3, (2009), 22-33.
25. M. Chalikias, G. Kaimakamis, M. Adam and N. Karadimas, *Discriminant analysis: A case study of a war data set*, International Mathematical Forum, v. 4, iss. 8, (2009), 351-357.
26. N. Assimakis and M. Adam, *Steady State Kalman filter for periodic models: A new approach*, Int. Journal of Contemporary Mathematical Sciences, v. 4, iss. 5, (2009), 201-218.
27. N. Assimakis and M. Adam, *FIR implementation of the steady state Kalman Filter*, Int. Journal of Signal and Imaging Systems Engineering, v.1, iss. 3-4, (2009), 279-286.
28. M. Adam and N. Assimakis, *Periodic Kalman filter: Steady state from the beginning*, Journal of Mathematical Sciences: Advances and Applications, v. 1, iss. 3, (2008), 505-520.
29. M. Adam, N. Assimakis and F. Sanida, *Algebraic solutions of the matrix equations  $X + A^T X^{-1} A = Q$  and  $X - A^T X^{-1} A = Q$* , Int. Journal of Algebra, v. 2, iss. 11, (2008), 501 – 518.
30. N. Assimakis, F. Sanida and M. Adam, *Recursive solutions of the matrix equations  $X + A^T X^{-1} A = Q$  and  $X - A^T X^{-1} A = Q$* , Applied Mathematical Sciences, v. 2, iss. 38, (2008), 1855-1872.
31. N. Assimakis and M. Adam, *Discrete time Kalman and Lainiotis Filters Comparison*, Int. Journal of Mathematical Analysis, v. 1, iss. 13, (2007), 635-659.

32. M. Adam and M. Tsatsomeros, *An eigenvalue inequality and spectrum localization for complex matrices*, Electronic Journal of Linear Algebra, v. 15, (2006), 239-250.
33. M. Adam and J. Maroulas, *Geometry in Canonical Correlations*, Communications in Statistics-Theory and Methods, v. 35, iss. 12, (2006), 2263-2273.
34. M. Adam and J. Maroulas, *Canonical correlations in multi-way layout*, Annals of the Institute of Statistical Mathematics, v. 56, iss. 4, (2004), 655-666
35. M. Adam and P. Psarrakos, *On a compression of normal matrix polynomials*, Linear and Multilinear Algebra, v. 52, iss. 3-4, (2004), 251-263.
36. M. Adam and J. Maroulas, *On Compressions of Normal Matrices*, Linear Algebra and Applies, v. 341, (2002), 403-418.
37. M. Adam, J. Maroulas and P. Psarrakos, *On the Numerical Range of Rational Matrix Functions*, Linear and Multilinear Algebra, v. 50, iss. 1, (2002), 75-89.
38. M. Adam and J. Maroulas, *The Joint Numerical Range of Bordered and Tridiagonal Matrices*, Linear Operators and Matrices, Operator Theory: Advances and Applies, v. 130, (2002), 29-41.
39. J. Maroulas and M. Adam, *Compressions and Dilations of Numerical Ranges*, SIAM J. on Matrix Analysis and Applies, v. 21, iss. 1, (1999), 230-244.

### **Refereed conferences publications**

1. M. Adam, N. Assimakis and G. Tziallas, *Generalized  $k,m$ -step Fibonacci sequences and matrices*, Proceedings of 12th International Conference of AHA-Algebraic Hyperstructures and its Applications, September 2014.
2. M. Adam and G. Kaimakamis, *Golden section, Fibonacci sequence and the time invariant Kalman and Lainiotis filters*, Proceedings 1<sup>st</sup> ISBEFA, June 2012, p. 400-401.
3. A. Koulis, C. Beneki, M. Adam and C. Botsaris, *The Efficiency of Greek Pension Fund Portfolios. An empirical approach*, EUROXXIV 2010, July 2010, p. 204.
4. M. Adam, F. Sanida, N. Assimakis and S. Voliotis, *Riccati Equation Solution Method for the computation of the extreme solutions of  $X + A^*X^{-1}A = Q$  and  $X - A^*X^{-1}A = Q$* , IWSSIP 2009, proceedings 2009 IEEE, 978-1-4244-4530-1/09, 41-44.

5. N. Assimakis, M. Adam, M. Koziri and S. Voliotis, *Optimal distributed Kalman and Lainiotis Filters-Optimal uniform distribution of measurements into local processors*, IWSSIP 2009, proceedings 2009 IEEE, 978-1-4244-4530-1/09, 19-24.
6. M. Adam et al. *Non-hermitian eigenproblems: Approaches, bounds and perturbations*, Pythagoras, July 2007, 321-328.
7. M. Adam and J. Maroulas, *The numerical range of Levinger function*, ICCAM2004, Leuven, July 2004.

## **Books**

1. M. Adam, J. Chantzaras and N. Assimakis, *Calculus*, Electronic publications, 2015, (in Greek).
2. N. Assimakis and M. Adam, *Signals and Systems*, Electronic publications, 2015, (in Greek).
3. M. Adam and N. Assimakis, *Matrix equations solutions using Riccati equation, Theory and Applications*, LAP, LAMBERT Academic Publishing, Germany, 2012.
4. N. Assimakis and M. Adam, *Recent Advances in Applied Signals, Systems and Image Processing*, the chapter “*Kalman Filtering – Recent Implementations*”, Springer-Verlag, 2009.
5. G. Donatos and M. Adam, *Linear Algebra-Theory and Applications*, Publications Gutenberg, Athens, 2008, (in Greek).
6. M. Maliakas and M. Adam, *Linear Algebra*, Electronic publications of Hellenic Open University, Athens, 2005, (in Greek).

## **Participation in Conferences /Contributed talks**

1. 12th International Conference of AHA-Algebraic Hyperstructures and its Applications, Xanthi, Greece, (September, 2014).
2. 1<sup>st</sup> International Symposium on Business, Economics and Financial Applications (ISBEFA), Kefalonia, Greece, (June, 2012).
3. 24<sup>th</sup> European Conference on Operational Research, EUROXXIV Lisbon, (7/2010).  
Title : *The Efficiency of Greek Pension Fund Portfolios. An empirical approach.*



4. 16th International Workshop on Systems Signals and Image Processing, Technological Educational Institute of Chalkida, Greece, (6/2009).  
Titles : i) *Riccati Equation Solution Method for the computation of the extreme solutions of  $X + A^*X^{-1}A = Q$  and  $X - A^*X^{-1}A = Q$*   
ii) *Optimal distributed Kalman and Lainiotis Filters-Optimal uniform distribution of measurements into local processors.*
5. 8<sup>th</sup> Panhellenic Conference in Algebra and Number Theory, National Technical University of Athens, Greece, (5/2008).
6. Conference-Pythagoras, National Technical University of Athens, (7/2007).  
Title : *Non-hermitian eigenproblems: Approaches, bounds and perturbations.*  
(In Greek).
7. 7<sup>th</sup> Panhellenic Conference in Algebra and Number Theory, University of Aegean, Samos, Greece, (7/2007).  
Title : *On the variation of numerical ranges of normal matrices.*
8. 8<sup>th</sup> Workshop on Numerical Range and Numerical Radii, WONRA 06, University of Bremen, (7/2006).  
Title : *The generalized Levinger transformation.*
9. 6<sup>th</sup> Panhellenic Conference in Algebra and Number Theory, University of Thessaloniki, (6/2006).  
Title : *The generalized Levinger transformation.*
10. Matrix Theory Conference, Technion – Israel Institute of Technology, (1/2005).  
Title : *A spectrum localization result for complex matrices.*
11. 12th International Linear Algebra Society Conference, University of Regina Regina, Saskatchewan, Canada, (6/2005).  
Title : *Spectrum localization for complex matrices.*
12. International Congress on Computational and Applied Mathematics (ICCAM2004), Leuven, Belgium, (7/2004).  
Title : *The numerical range of the Levinger function.*
13. IMPS Conference, Cagliari, Sardinia, (7/2003).  
Title : *Canonical correlations in multi-way layout..*
14. 4<sup>th</sup> Panhellenic Conference in Algebra and Number Theory, University of Patras, Greece, (6/2002).
15. CMS Summer Meeting, University of Saskatchewan, Canada, (6/2001).  
Title: *On Compressions of Normal Matrices.*
16. International Linear Algebra Conference, Technion Haifa, Israel, (6/2001).  
Title: *On Compressions of Normal Matrices.*
17. 3rd Panhellenic Conference in Algebra and Number Theory, University of Crete, Anogia, Greece, (9/2000). Title : *The Joint Numerical Range of Boarder and Tridiagonal Matrices.*
18. International Conference “Mathematical Analysis and its Applications”, National Technical University of Athens, (8/2000).
19. 5th Workshop on «Numerical Range and Radii», Nafplio, (6/2000).  
Title : *On the Joint Numerical Range of Tridiagonal and Boarder Matrices.*
20. European Conference «Homological Invariants in Representation Theory», University of Ioannina, Greece, (3/1999).
21. 4<sup>th</sup> Workshop on «Numerical Ranges and Numerical Radii», University of Wisconsin – Madison USA, (6/1998).  
Title : *On the numerical range of rational matrix functions.*
22. 2<sup>nd</sup> Panhellenic Conference in Algebra and Number Theory, University of Thessaloniki, Greece, (6/1998).



Title : *Compressions and Dilations of numerical ranges of matrices.*

## **Citations**

- H. Nakazato and P. Psarrakos, *On the shape of numerical range of matrix polynomials*, Linear Algebra and Applics, v. 338, (2001), 105-123, in “Compressions and Dilations of Numerical Ranges”, SIAM J. on Matrix Analysis and Applics, (1999).
- M. Chien and H. Nakazato, *The numerical range of linear pencils of 2-by-2 matrices*, Linear Algebra and Applics, v. 341, (2002), 69-100, in “Compressions and Dilations of Numerical Ranges”, SIAM J. on Matrix Analysis and Applics, (1999).
- H. Gau and P. Wu, *Numerical range and Poncelet property*, Taiwanese Journal of Mathematics, v. 7, iss. 2, (2003), 173-193, in “On Compressions of Normal Matrices”, Linear Algebra and Applics, (2002).
- H. Gau and P. Wu, *Numerical range of a normal compression*, Linear and Multilinear Algebra, v. 52, iss. 3-4, (2004), 195-201, in “On Compressions of Normal Matrices”, Linear Algebra and Applics, (2002).
- H. Gau and P. Wu, *Numerical range of a normal compression II*, Linear Algebra and Applics, v. 390, (2004), 121-136, in “On Compressions of Normal Matrices”, Linear Algebra and Applics, (2002).
- Chia-Ping Li, *Normal Compressions and Normal Dilations*, Master's Thesis, (2004), in “On Compressions of Normal Matrices”, Linear Algebra and Applics, (2002).
- E. Brown and I. Spitkovsky, *On matrices with elliptical numerical ranges*, Linear and Multilinear Algebra, v. 52, iss. 3-4, (2004), 177-193, in “The Joint Numerical Range of Bordered and Tridiagonal Matrices”, Operator Theory: Advances and Applics, (2001).
- Feng-Chang Lee, *On Subnormality For Non-normal matrices*, Master's Thesis, (2005), in “Compressions and Dilations of Numerical Ranges”, SIAM J. on Matrix Analysis and Applics, (1999).
- Feng-Chang Lee, *On Subnormality For Non-normal matrices*, Master's Thesis, (2005), in “On Compressions of Normal Matrices”, Linear Algebra and Applics, (2002).
- Chi-Kwong Li, *Lecture notes on Numerical range*, (2005), <http://www.math.wm.edu/~ckli/nrnote>, and/or <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.80.2307>, in “On the Numerical Range of Rational Matrix Functions”, Linear and Multilinear Algebra, (2002).
- A. Salemi and G.R. Achamollaei, *Polynomial numerical hulls of matrix polynomials*, Linear and Multilinear Algebra, v. 55, iss. 3, (2007), 219-228, in “On a compression of normal matrix polynomials”, Linear and Multilinear Algebra, (2004).
- Aysan Şentürk, *A Study on the Relationship between Shares and Inflation, Exchange Rates and Interest Rates with the use of Canonical Correlation Analysis*, Economic Studies, Икономически изследвания, v. 3, (2007), 43-64, in “Geometry in Canonical Correlations”, Communications in Statistics-Theory and Methods, (2006).
- Chi-Kwong Li, Yiu-Tung Poon and Nung-Sing Sze, *Eigenvalues of the sum of matrices from unitary similarity orbits*, SIAM, J. Matrix Analysis and its Appl.,

- v. 30, iss. 2, (2008), 560-581, in “*An eigenvalue inequality and spectrum localization for complex matrices*”, *Electronic Journal of Linear Algebra*, (2006).
- N. Papathanasiou and P. Psarrakos, *Normal matrix polynomials with nonsingular leading coefficients*, *Electronic Journal of Linear Algebra (ELA)*, v. 17, (2008), 458-472, in “On a compression of normal matrix polynomials”, *Linear and Multilinear Algebra*, (2004).
  - N. Assimakis, A. Kechriniotis, S. Voliotis, F. Tassis and M. Kousteri, *Analysis of the time invariant Kalman Filter implementation via General Chandrasekhar algorithm*, *Int. J. Signal and Imaging Systems Engineering*, v. 1, iss. 1, (2008), 51-57, in “Discrete time Kalman and Lainiotis Filters Comparison”, *Int. Journal of Mathematical Analysis*, (2007).
  - N. Assimakis, *Optimal distributed Lainiotis filter*, *Int. J. of Math. Analysis*, v. 3, iss. 22, (2009), 1061-1080, in “Discrete time Kalman and Lainiotis Filters Comparison”, *Int. Journal of Mathematical Analysis*, (2007).
  - N. Assimakis, *Discrete time Riccati equation recursive multiple steps solutions*, *Contemporary Engineering Sciences*, v. 2, iss. 7, (2009), 333-354, in “Discrete time Kalman and Lainiotis Filters Comparison”, *Int. Journal of Mathematical Analysis*, (2007).
  - V. Larin, *Solutions of matrix equations in problems of mechanics and control*, *International Applied Mechanics*, v. 45, iss. 8, (2009), 847-872, doi: 10.1007/s10778-009-0232-5, in “Algebraic solutions of the matrix equations  $X + A^T X^{-1} A = Q$  and  $X - A^T X^{-1} A = Q$ ”, *Int. Journal of Algebra*, (2008).
  - F. Aliev and V. Larin, *About use of the bass relations for solution of matrix equations*, *Applied and Computational Mathematics*, v. 8, iss. 2, (2009), 152-162, in “Algebraic solutions of the matrix equations  $X + A^T X^{-1} A = Q$  and  $X - A^T X^{-1} A = Q$ ”, *Int. Journal of Algebra*, (2008).
  - J. Bay, E. Ghysels and J. Wright, *State Space Models and MIDAS Regressions*, (2009), <http://130.203.133.150/viewdoc/summary?doi=10.1.1.184.4807>, in “Steady State Kalman filter for periodic models: A new approach”, *Int. Journal of Contemporary Mathematical Sciences*, (2009).
  - Katsuno Mie and Sasaki Satoshi, *The Japanese Situation and Subjects of Health and Nutrition-related Research in the World: Country and Agency Rankings in Article Production*, Discussion Paper, No 72, (2010), 3rd Policy-Oriented Research Group, National Institute of Science and Technology Policy (NISTEP), Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan, in “A new author’s productivity index: p-index”, *Scientometrics*, (2010).
  - G. Aghamollaei, A. Salemi, *Polynomial numerical hulls of matrix polynomials II*, *Linear and Multilinear Algebra*, v. 59, iss. 3, (2011), 291-302, in “On a compression of normal matrix polynomials”, *Linear and Multilinear Algebra*, (2004).
  - Emmanuel Kamgnia and Bernard Philippe, *Counting eigenvalues in domains of the complex field*, Working paper No 7770, Institut National de Recherche en Informatique et en Automatique (INRIA), Centre de recherche Rennes-Bretagne Atlantique, ver. 2-21, (Oct. 2011), in “An eigenvalue inequality and spectrum localization for complex matrices”, *Electronic Journal of Linear Algebra*, (2006).
  - Ana Cristina Becerra Nata dos Santos, *Contradominios numericos em espacos de Hilbert e em espacos de Krein, Teoria, algoritmos e implementacao computacional*, Dissertacao submetida na Faculdade de Ciencias e Tecnologia da

Universidade de Coimbra, para cumprimento dos requisitos necessários para obtenção do grau de Doutor em Matemática (especialidade em Matemática Pura), Coimbra, (2011), in “The generalized Levinger transformation”, Journal of Computational and Applied Mathematics, (2010).

- Aikaterini Aretaki and John Maroulas, The  $k$ -rank numerical radii, Annals of Functional Analysis, v. 3, iss. 1, (2012), 100-108, in “On the numerical range of rational matrix functions”, Linear and Multilinear Algebra, (2002).
- Asmaa M. Al-Dubiban and Salah M. El-Sayed, On the Positive Definite Solutions of the Nonlinear Matrix equation  $X - A^* X^{-s} A - B^* X^{-t} B = I$ , Communications in Numerical Analysis, v. 2012, (2012), in “Algebraic solutions of the matrix equations  $X + A^T X^{-1} A = Q$  and  $X - A^T X^{-1} A = Q$ ”, Int. Journal of Algebra, (2008).
- Asmaa M. Al-Dubiban and Salah M. El-Sayed, On the Positive Definite Solutions of the Nonlinear Matrix equation  $X - A^* X^{-s} A - B^* X^{-t} B = I$ , Communications in Numerical Analysis, v. 2012, (2012), in “Recursive solutions of the matrix equations  $X + A^T X^{-1} A = Q$  and  $X - A^T X^{-1} A = Q$ ”, Applied Mathematical Sciences, (2008).
- P. Falsaperla, Andrea Giacobbey and G. Mulone, Does symmetry of the operator of a dynamical system help stability?, Acta Applicandae Mathematicae, v. 122, iss. 1, (2012), doi: 10.1007/s10440-012-9740-0, in “An eigenvalue inequality and spectrum localization for complex matrices”, Electronic Journal of Linear Algebra, (2006).
- P. Falsaperla, A. Giacobbey and G. Mulone, Does symmetry of the operator of a dynamical system help stability?, Acta Applicandae Mathematicae, v. 122, iss. 1, (2012), 239-253, in “An eigenvalue inequality and spectrum localization for complex matrices”, Electronic Journal of Linear Algebra, (2006).
- Alexander Karpov, Equal weights coauthorship sharing and shapley value are equivalent, Working Papers, Basic Research Program, WP BRP 03/STI/2012, National Research University Higher School of Economics, (2012), in “A new author’s productivity index: p-index”, Scientometrics, (2010).
- Panayiotis J. Psarrakos and Michael J. Tsatsomeros, An envelope for the spectrum of a matrix, Central European Journal of Mathematics, v. 10, iss. 1, (2012), in “An eigenvalue inequality and spectrum localization for complex matrices”, Electronic Journal of Linear Algebra, (2006).
- Muruganandan Sivanmalaiappan, Timing and Selection Ability of Fund of Mutual Funds in India, Working Paper, Bharathiar University, Department of Commerce, (2013), <http://ssrn.com/abstract=2206199>, in “An Assessment of the Performance of Greek Mutual Equity Funds: Selectivity and Market Timing”, Applied Mathematical Sciences, (2011).
- J. Bay, E. Ghysels and J. Wright, State Space Models and MIDAS Regressions, (2013), Economic Reviews, v. 32, iss. 7, 779-813, in “State Kalman filter for periodic models: A new approach”, Int. Journal of Contemporary Mathematical Sciences, (2009).
- Arfian Fidya Utama, Evaluation Performance of Equity Funds By Sharpe, Treynor, Jensen, Modigliani, Sortino, and Erov, (Case Study Equity Funds Listed in Securities and Exchange Commission (BAPEPAM) Period 2010 – 2012), Management Department, Faculty of Economics and Businesses, State Islamic University Syarif Hidayatullah, Jakarta, Undergraduate Thesis, (2013), <http://repository.uinjkt.ac.id/dspace/handle/123456789/23911>, in “An

Assessment of the Performance of Greek Mutual Equity Funds: Selectivity and Market Timing”, *Applied Mathematical Sciences*, (2011).

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## **Editing and Conference Organization Activities**

- Reviewer in Scientific Journals
  - ✓ Linear Algebra and Its Applications (LAA).
  - ✓ Electronic Journal of Linear Algebra (ELA).
  - ✓ Applied Numerical Mathematics (APNUM).
  - ✓ Numerical Algorithms (NUMA).
  - ✓ Advances in Difference Equations (AIDE).
  - ✓ Journal of Applied Mathematics, Hindawi Publishing Corporation.
  - ✓ Australian Journal of Mathematical Analysis and Applications (AJMAA).
  - ✓ Signal Processing (SigPro-Elsevier).
  - ✓ Digital Signal Processing (DSP-Elsevier).
  - ✓ Journal of Basic and Applied Research International.
  - ✓ Asian Journal of Mathematics and Computer Research.
- Reviewer for Mathematical Reviews since 2008.
- Member of the organizing committee of the conferences:
  - ✓ Numerical Ranges and Numerical Radii, Nafplio 2000”.
  - ✓ 1<sup>st</sup> International Symposium on Business, Economics and Financial Applications, ISBEFA, Kefalonia, Greece, 2012.