



# **CV**

***Stelios KOTSIOS***

***Στέλιος Κώτσιος***

# ***ATHENS-2017***

**Section A:** Basic Information

**Section B:** Papers

**Section C:** Statements

## **SECTION A**

### **BASIC INFORMATION**



#### At a glance

<b>Name</b>	<b>KOTSIOS Stelios</b>
<b>Position</b>	<b>Professor, Department of Economics, Division of Mathematics and Computer Science, National and Kapodistrian University of Athens, Greece</b>
<b>Specialization</b>	<b>Applied Mathematics, Control Theory</b>
<b>Research interest</b>	<b>Nonlinear Control and Dynamics</b>
<b>Active years</b>	<b>Since 1993</b>
<b>Papers</b>	<b>75 (39 Journals + 36 Congresses)</b>
<b>Citations</b>	<b>252</b>

### ***A.1. PERSONAL INFORMATION***

#### **Identity Elements**

<b>Surname:</b>	<b>KOTSIOS</b>
<b>Name:</b>	<b>STYLIANOS or STELIOS</b>
<b>Father's name:</b>	<b>ALFONSOS</b>
<b>Mother's name:</b>	<b>ANASTASIA</b>
<b>Nationality:</b>	<b>GREEK</b>
<b>Marriage situation:</b>	<b>MARRIED - 3 CHILDREN</b>
<b>Basic studies:</b>	<b>MATHEMATICIAN</b>

Foreign languages:	<b>ENGLISH (very well), GERMAN (fairly)</b>
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## Addresses

<b>Work</b>	<b>Home</b>
UNIVERSITY OF ATHENS, DEPARTMENT OF ECONOMICS, DIVISION OF MATHEMATICS AND COMPUTER SCIENCE, SOFOKLEOUS 1, 10559 ATHENS, GREECE  Tel: 00302103689874 Fax: 00302103228538 e-mail: skotsios@econ.uoa.gr	GRIVA 17-19, HALANDRI 15233, ATHENS, GREECE  Tel: 00302106894328 Mobile: 6932690203

## Current Professional Position

I am PROFESSOR at the University of Athens, Department of Economics, Division of Mathematics and Computer Science.

## Basic Studies

<b>Year</b>	<b>Degree</b>
1983	Bachelor Degree - University of Athens, Department of Mathematics.
1986	Master Degree. - Operational Research and Computer Science, University of Athens
1993	PhD - Department of Informatics, University of Athens

## ***A.2. PREVIOUS PROFESSIONAL POSITIONS***

- Military Academy of Greece, Greece. (1983-1994), Lecturer of Advanced Mathematics.
- Department of Informatics, University of Athens, Greece. (1989-1993), teaching assistant in Control Theory and Applied Mathematics.

- Ministry of Public Education, Athens, Greece. (1993-1994) Instructor of Probability Theory and Computer Science at the Special Division, where the future teachers of high-schools are trained after their graduation.
- University College Dublin, Ireland. (1994-1996), Human Capital Fellowship at the Engineering Department, on the field of Dynamical Behaviour of Special Control Systems.
- National Technical University of Athens, Greece. (1996-1997), Research Fellow at the Mathematical Department, on the field of Discrete Control Systems with Discontinuities.
- MIS-Foundation Centre, Athens, Greece. (1996-1998), Teacher of Mathematics to students who intended to follow engineering studies in English universities.
- Technological Education Institute (TEI) of Athens, Greece. (1997-1998), Lecturer of Mathematics.
- University of Thessaly, Department of Civil Engineering, Volos, Greece. (1997-1998), Part-time Associate Professor at the field of Advanced Calculus and Differential Equations.
- The University of Peloponnesus, Department of Computer Science, Tripoli, Greece. (2002 – 2003), Visiting Professor at the fields of Advanced Calculus and Linear Algebra.
- The Open University of Greece, Department of Computer Science, Patra, Greece. (2002 – 2017), Instructor at the fields of Advanced Calculus Linear Algebra and Quantitative Methods.
- University of Athens, Department of Economics, Division of Mathematics and Computer Science, Athens, Greece. (1999 – 2017), Lecturer, Assistant Professor (since 2003) , Associate Professor (since 2010) and Professor (since 2016) on the fields of Advanced Calculus, Linear Algebra, Differential Equations, Dynamical Economics and Computational Mathematics.

### ***A.3. SEVERAL SCIENTIFIC ACTIVITIES***

#### **Editor – Reviewer**

- Since 1987 until 1990, I participated in the editorial board and the secretarial office of the Mathematical Review Magazine of the Greek Mathematical Society.
- I have reviewed several papers for the following journals:

Applied Mathematics E- Notes (Full paper)
Asian Journal of Control (Full Paper)
Automatica (Full paper)
Economic Modeling (Full paper)
European Journal of Control (Full papers)
IEEE Transactions on Automatic Control (Full papers)
IEEE Transactions on Automatic Control (Short paper)
IMA, Journal of Information and Control (Full papers)
International Journal of Control (Full Papers)

International Journal of Mathematics (Full paper)
International Journal of Systems Science (Full Paper)
ITB Journal of Engineering Science (Full Paper)
Journal of Mathematical Systems Estimation and Control (Full paper)
Journal of Reviews on Global Economics.
Nonlinear Dynamics (Full Papers)
Numerical Algorithms.(Full Paper)
SIAM, Journal of Optimization and Control (Full paper)
Transactions of the Institute of Measurement and Control (Full Paper)
<b>Journal of Applied Mathematics and Computation.</b>
Mathematical Review Magazine (Short paper)
Journal of Mathematics Research

- I have reviewed papers for the following conferences:

52nd IEEE Conference on Decision and Control, Firenze, Italy, December, 2013
2012 ACC
2013 American Control Conference, Washington, DC, USA
24th Chinese Control and Decision Conference, Taiyuan, China 2012. (2012CCDC)
26th Chinese Control and Decision Conference, Changsha, China 2014.
30 <sup>th</sup> Conference on Decision and Control
31st Chinese Control Conference, China 2012.
33 <sup>rd</sup> International Conference on Current Trends in Theory and Practice of Computer Science, January 2007, Harrachov, Czech Republic. (SOFSEM07)
53rd IEEE Conference on Decision and Control, Los Angeles, California, USA, December 15-17, 2014
CDC-ECC11, to be held at Orlando, FL, USA during December 12-15, 2011
European Control Conference 2001
European Control Conference, 2005.
European Control Conference, 2007
IASTED 2012
ICCA11
IFAC 2002, 15 <sup>th</sup> World Congress, Barcelona, Spain
IFAC World Congress, July 1996
<b>IFAC WC 2017</b>
<b>CDC 16</b>

## **PhD and MSc supervision**

<b>NAME OF THE CANDIDATE</b>	<b>POSITION</b>	<b>YEAR</b>	<b>TITLE OF THE THESIS</b>	<b>CATEGORY</b>
Dr. Athanasiou George	MAIN SUPERVISOR	2008	"Applications of Control Theory to the Study of Economical Systems"	PhD
Dr. Kostarakos Ilias	MAIN SUPERVISOR	2017	"Control theory applications for the design of fiscal policy"	PhD
Dr. Marsellou Emily	MAIN SUPERVISOR	2018	" Models on Private Debt, Income Distribution and Macroeconomic Stability"	PhD
Dr. Stamatakis John	SECONDARY SUPERVISOR	2004	"Economics of Education: Issues on Growth".	PhD
Dr. Patokos Anastasios	SECONDARY SUPERVISOR	2007	"Economic Agent's Rationality and its evolution"	PhD
Dr. Aris Gaides	SECONDARY SUPERVISOR	2018	"Corporate Governance and Corporate Financial Policies"	PhD
Dr. Dimitris Pissas	SECONDARY SUPERVISOR	2018	" The Probability of Detection & the Penalty Rate as Deterrents to Tax Evasion"	PhD
Mr. Tsampras Paris	MAIN SUPERVISOR	2017	"Developing Software for Dynamic Programming Problems"	MSc
Mr. Koliofotis Vaios	MAIN SUPERVISOR	2003	"Continuous Time Stochastic Optimal Control Methods and Economical Growth"	MSc
Mrs. Kaila Dimitra	MAIN SUPERVISOR	2002	"Study of environmental policies by means of optimal control methods"	MSc

## List of research Projects in which I have participated the last years

<b>Title</b>	<b>Host Organization</b>	<b>Budget</b>	<b>Source</b>	<b>My Role</b>	<b>Dates</b>
Efficient Algorithms for Systems Identification – Research Grant	University of Athens		Funded by the Greek Ministry of Industry Research and Technology.	Simple Researcher	1989
Nonlinear Control and ΣΔ-Modulators Institutional Fellowship – Research Grant	University College Dublin	150000 Irish Pounds	Human Capital and Mobility	Main Fellow	1994-1995
Nonlinear Control – Research Grant	National Technical University	18000000 Drachmas	Return Grant-Training and Mobility of Researchers	Main Fellow	1996-1997
Systems with Discontinuity – Research Grant	University of Athens	700.000 Drachmas	Internal Grant of University of Athens	Coordinator	1999-2000
Nonlinear Control	University of Athens	700.000	Internal Grant of	Coordinator	2000-2001

Systems in Economy – Research Grant		Drachmas	University of Athens		
Optimal Control in Economy – Research Grant	University of Athens	2000 Euro	Internal Grant of University of Athens	Coordinator	2002-2003
Nonlinear Control Techniques in Economy – Research Grant	University of Athens	2000 Euro	Internal Grant of University of Athens	Coordinator	2004-2005
Secondary School Students Mobilization-Consultant Grant	University of Athens –Ministry of Education	6000000 Euro	ESPA-European Union	Senior Fellow	2008-2009
Nonlinear Control Techniques and Dynamics of the National Debt – Research Grant	University of Athens	8000 Euro	Internal Grant of University of Athens	Coordinator	2012
Nonlinear Control Techniques and Dynamics of the National Debt – Part B Research Grant	University of Athens	5000 Euro	Internal Grant of University of Athens	Coordinator	2013
Nonlinear Control Techniques and Dynamics of the National Debt – Part C Research Grant	University of Athens	2000 Euro	Internal Grant of University of Athens	Coordinator	2014

## Seminars – Summer Schools - Visits

- On November 1994, I gave a seminar at Birmingham University, invited by Prof.Norton. The title was: «The Model Matching Problem and BIBO Stability Criteria for a Certain Class of Nonlinear Systems ».
- On May 1997, I gave a seminar at Aegean University, Samos-Greece, invited by Prof. Hatzisavas. The title was: «Contribution to the study of the Nonlinear Discrete Control Systems».
- I attended the following summer schools as invited speaker.
  1. The second summer school on Nonlinear Analysis, Samos, Greece, 1994.
  2. The third summer school on Nonlinear Analysis, Samos, Greece, 1995.
- I was responsible for the visit of **Prof. Prasolov** from Saint Petersburg University, Russia. He stayed in our university during September and October 2008, for scientific discussions and presentations.
- **E-Learning.** I am the scientific manager of various IT projects of the e-learning program of the University of Athens.



## **SECTION B**

### **PAPERS**

I have published 39 papers in peer review journals and 36 in congresses.  
I have written 2 books in Greek and translated another one.

TOTAL NUMBER OF SELF-CITATIONS=115  
TOTAL NUMBER OF OTHERS-CITATIONS =137  
TOTAL NUMBER OF CITATIONS=252  
H-Index=9

#### ***B.1. STATISTICS***

##### **Papers in peer review journals and volumes**

<b>YEAR</b>	<i>I AM THE ONLY AUTHOR</i>	<i>I AM CO- AUTHOR</i>	<i>SUM</i>
1989	-	1	1
1991	-	1	1
1993	2	2	4
1995	1	1	2
1996	-	1	1
1997	1	1	2
1998	-	2	2
1999	1	-	1
2000	2	-	2
2001	1	1	2
2002	1	0	1
2004	-	1	1
2005	-	1	1
2006	-	1	1
2007	1	-	1
2008	1	3	4
2009	1	-	1
2010	-	1	1

2011	1	1	2
2013	-	1	1
2014	1	-	1
2016	1	1	2
2017	-	3	3
2018		1	1
<b>Sum</b>	<b>15</b>	<b>24</b>	<b>39</b>

### Papers per Journal

JOURNAL	I AM THE ONLY AUTHOR	I AM CO-AUTHOR	SUM
IEEE TAC	2	-	2
Automatica	1	-	1
Int. Journal Of Control	2	2	4
Phys. Rev. B	-	1	1
Jour. of Difference Eqs	1	1	2
IMA Control	4	3	7
Nonlinear Dynamics	1	1	2
MTNS Volume	-	1	1
Jour. Franklin Inst.	1	1	2
Bulletin Greek Math. Soc.	1	-	1
Indian Jour. Of Math.	-	1	1
International Journal of Systems Science	-	1	1
Applied Math-E-Notes	1		1
Economic Bulletin	-	1	1
Economic Modeling		1	1
Journal of Economic Dynamics & Control		1	1
Revue Economique		1	1
Intelligent Information Management		1	1
<i>International Review of Applied Economics</i>		1	1
Applications of Mathematics and Informatics in Sciences and Engineering		1	1
Applied Mathematics and Computation	1	-	1
Computational Economics		1	1
International Journal of Difference Equations.		1	1
Economic Structures		1	1
Vestnik of Saint Petersburg University		1	1
FACTA UNIVERSITATIS		1	1
<b>Sum</b>	<b>15</b>	<b>24</b>	<b>39</b>

### Congresses

YEAR	I AM THE ONLY AUTHOR	I AM CO-AUTHOR	SUM
1991	-	1	1

1993	-	1	1
1994	1	-	1
1995	1	1	2
1996	1	1	2
1997	1	-	1
1998	1	-	1
2000	-	1	1
2003	2	5	7
2004	-	2	2
2005	1	-	1
2006		1	1
2007	2		2
2008		2	2
2011		1	1
2012		1	1
2013		1	1
2014	1	1	2
2015		5	5
2018		1	1
<b>Sum</b>	<b>11</b>	<b>25</b>	<b>36</b>

## ***B.2. A SHORT LIST OF ALL PAPERS***

### *PAPERS IN JOURNALS*

1. J. Tsiniias - S. Kotsios - N. Kalouptsidis. [TOPOLOGICAL DYNAMICS OF DISCRETE TIME SYSTEMS](#). Proceeding of the International Symposium MTNS - 89, vol. II, Birkhauser, p 457-463, (1989).
2. G. Papavassiliou - A. Anagnostopoulos - F. Milia - R. Blinc - S. Kotsios [DISCRETE LATTICE EFFECTS AND THE PHASON GAP OF INCOMMENSURATE SYSTEMS](#). Physical Review B, Volume 44, Number 14, pp 7283-7288, (1991).
3. S. Kotsios [ABOUT SPECIAL FUNNELS OF DYNAMICAL SYSTEMS WITHOUT UNIQUENESS ON THE PLANE](#). Bulletin of the Greek Mathematical Society, vol. 35, pp 81-92, (1993).
4. S. Kotsios - N. Kalouptsidis [THE MODEL MATCHING PROBLEM FOR A CERTAIN CLASS OF NONLINEAR SYSTEMS](#). International Journal of Control, VOL. 57, No 4, pp 881-919, (1993).
5. S. Kotsios - N. Kalouptsidis [BIBO STABILITY CRITERIA FOR A CERTAIN CLASS OF NONLINEAR SYSTEMS](#). International Journal of Control, VOL. 58, No 3, pp 707-730, (1993).
6. S. Kotsios [SOME TOPOLOGICAL DYNAMICS PROPERTIES OF DISCRETE TIME CONTROL SYSTEMS](#). IMA Journal of Mathematical Control and Information, VOL. 10, pp 149-155, (1993).
7. Y. Bakopoulos - S. Kotsios [THE STUDY OF A SPECIFIC DIFFERENTIAL EQUATION](#).

- Indian Journal of Pure and Applied Math., 26(3): pp 241-247, March (1995).
8. S. Kotsios [A NOTE ON BIBO STABILITY OF BILINEAR SYSTEMS.](#) Journal of the Franklin Institute, VOL. 332B, No 6, pp 755-760, (1995).
  9. S. Kotsios - D. Lappas [A DESCRIPTION OF 2 - DIMENSIONAL DISCRETE POLYNOMIAL DYNAMICS.](#) IMA Journal of Mathematical Control and Information, 13, pp 409-428, (1996).
  10. S. Kotsios [FINITE INPUT/OUTPUT REPRESENTATION OF A CLASS OF VOLTERRA POLYNOMIAL SYSTEMS.](#) Automatica, VOL. 33, No 2, pp 257-262 (1997).
  11. S. Kotsios-Or. Feely [SOME RESULTS ON SPECIAL DOUBLE-LOOP  \$\Sigma\Delta\$ -MODULATORS.](#) Nonlinear Dynamics 13 : 59-82, (1997).
  12. S. Kotsios-Or. Feely [A BIBO STABILITY THEOREM FOR A TWO DIMENSIONAL FEEDBACK DISCRETE SYSTEM WITH DISCONTINUITIES.](#) J. Franklin inst. Vol. 335B, No. 3, pp 533-537, (1998).
  13. S. Kotsios-Or. Feely [THE MODEL MATCHING PROBLEM FOR A SPECIAL CLASS OF DISCRETE SYSTEMS WITH DISCONTINUITY.](#) IMA Journal of Mathematical Control and Information, 15, 93-104, (1998).
  14. S. Kotsios [TRANSFORMATION OF FINITE DEGREE DISCRETE VOLTERRA SYSTEMS WITH CROSS-PRODUCTS TO FINITE INPUT/OUTPUT FORMS.](#) IEEE Trans. on Autom. Control, Vol. 44, No 7. pp 1460-1464, (1999).
  15. S. Kotsios [A NEW FACTORIZATION OF SPECIAL NONLINEAR DISCRETE SYSTEMS AND ITS APPLICATIONS.](#) IEEE Trans. on Autom. Control, Vol 45, No 1, pp 24-33, (2000).
  16. S. Kotsios [SYMBOLIC SEQUENCES GENERATED BY A SPECIAL CLASS OF DISCRETE SYSTEMS WITH DISCONTINUITY AND INPUT.](#) Nonlinear Dynamics 22: 175-191, (2000).
  17. S. Kotsios-D. Lappas [A STABILITY RESULT FOR "SEPARABLE" NONLINEAR DISCRETE SYSTEMS.](#) IMA Journal of Mathematical Control and Information, 18, 325-339, (2001).
  18. S. Kotsios [AN APPLICATION ON RITT'S REMAINDER ALGORITHM TO DISCRETE POLYNOMIAL CONTROL SYSTEMS.](#) IMA Journal of Mathematical Control and Information, 18, 19-29, (2001).
  19. S. Kotsios [ON DETECTING SOLUTIONS OF POLYNOMIALS NONLINEAR DIFFERENCE EQUATIONS.](#) Journal of Difference Equations and Applications, (2002), Vol. 8 (6), pp 551-571.
  20. S.Kotsios and J.Leventidis [A FEEDBACK POLICY FOR A MODIFIED SAMUELSON-HICKS MODEL.](#) International Journal of Systems Science, vol 35, (6), pp 331-341, 2004.
  21. E.Petrakis and S.Kotsios [THE DYNAMICS OF STRUCTURAL CHANGE UNDER RISK INFLUENCE.](#) Economics Bulletin, Vol 15, No 7, pp 1-8, 2005.
  22. I. Karafyllis - S.Kotsios [NECESSARY AND SUFFICIENT CONDITIONS FOR ROBUST GLOBAL ASYMPTOTIC STABILIZATION OF DISCRETE TIME SYSTEMS.](#) Journal of Difference Equations and Applications, (2006), Vol. 12 (7), pp 741-768.
  23. S. Kotsios [AN ALGORITHM FOR DETECTING " LINEAR " SOLUTIONS OF NONLINEAR POLYNOMIAL DIFFERENTIAL EQUATIONS.](#) Applied Mathematics E-Notes, 7(2007), 102-110

24. S.Kotsios [OPEN-LOOP LINEARIZATION OF NON-LINEAR DISCRETE INPUT - OUTPUT SYSTEMS THROUGH SIMPLIFICATION ALGORITHMS](#). IMA Journal of Mathematical Control and Information (2008) 25, 123-139
25. G. Athanasiou - I. Karafyllis - S.Kotsios [PRIZE STABILIZATION USING BUFFER STOCKS](#). Journal of Economic Dynamics & Control 32 (2008) 1212-1235
26. B. Dalamagas - S.Kotsios [PERSONAL INCOME TAX: INCENTIVE OR DISINCENTIVE TO WORK EFFORT ?](#) REVUE ECONOMIQUE, Volume 59, 4, July 2008, pp 777-812.
27. George Athanasiou, Stelios Kotsios [AN ALGORITHMIC APPROACH TO EXCHANGE RATE STABILIZATION](#). Economic Modelling 25 (2008) 1246-1260.
28. S.Kotsios [THE MODEL MATCHING PROBLEM FOR A CLASS OF POLYNOMIAL NON-LINEAR DISCRETE INPUT - OUTPUT SYSTEMS WITH CROSS -PRODUCTS. AN ALGORITHMIC APPROACH](#). INTERNATIONAL JOURNAL OF CONTROL Vol. 82, No. 4, April 2009, 620-642.
29. P. E. Petrakis, S. Kotsios [A NON LINEAR CONTROL MODEL OF GROWTH, RISK AND STRUCTURAL CHANGE](#). Intelligent Information Management, 2010, 2, 80-89  
doi:10.4236/iim.2010.22010 Published Online February 2010  
(<http://www.scirp.org/journal/iim>)
30. V. Dalamagas, S. Kotsios [A MACROECONOMIC APPROACH TO THE INCOME TAX-WORK EFFORT RELATIONSHIP](#). International Review of Applied Economics Volume 26, Issue 3, May 2012, Pages 349-366
31. S.Kotsios "[A SYMBOLIC COMPUTATIONAL ALGORITHM FOR DESIGNING FEEDBACK STABILIZERS OF POLYNOMIAL NONLINEAR SYSTEMS](#)" IMA J Math Control Info (2011) 28(4): 463-474.
32. S.Kotsios - D.Lappas "[ABOUT MODEL COMPLEXITY OF 2-D POLYNOMIAL DISCRETE SYSTEMS. AN ALGEBRAIC APPROACH](#)" Volume: Applications of Mathematics and Informatics in Sciences and Engineering, Springer Optimization and Its Applications, 2013.
33. S.Kotsios, "[AN ALGORITHMIC METHOD FOR CHECKING GLOBAL ASYMPTOTIC STABILITY OF NONLINEAR POLYNOMIAL SYSTEMS WITH PARAMETERS](#)", Applied Mathematics and Computation, *Volume 240*, 1 August 2014, Pages 358-367.
34. S.Kotsios, "[FEEDBACK BOUNDED STABILIZATION OF CERTAIN DISCRETE VOLTERRA SYSTEMS](#)", International Journal of Control Volume 89, 2016 - Issue 6, 1214-1221.
35. Ilias Kostarakos-Stelios Kotsios "[FISCAL POLICY IN GREECE IN THE AFTERMATH OF THE CRISIS: AN ALGORITHMIC APPROACH](#)", It has been accepted for publication in Computational Economics.
36. S. Kotsios-D. Lappas "[THE SYSTEMS COMPLEXITY PROBLEM FOR NONLINEAR POLYNOMIAL DISCRETE SYSTEMS WITH MANY DELAYS AND TWO COMPONENTS. AN ALGEBRAIC APPROACH](#)." It has been accepted for publication in INTERNATIONAL JOURNAL OF DIFFERENCE EQUATIONS.
37. Ilias Kostarakos-Stelios Kotsios "[FEEDBACK POLICY RULES FOR GOVERNMENT SPENDING: AN ALGORITHMIC APPROACH](#)", It has been accepted for publication in Journal of Economic Structures.
38. Stelios Kotsios-Kostarakos Ilias. "[Controlling National Income and Debt via Extra Taxation. A Model Matching Algorithmic Approach](#)." Journal "Vestnik of

Saint Petersburg University. Series 10. Applied Mathematics, Informatics, Control Processes", № 4, 2016.

39. Stelios Kotsios – Evangelos Melas, “[NONLINEAR INVARIANTS OF PLANAR POINT CLOUDS TRANSFORMED BY MATRICES](#)” FACTA UNIVERSITATIS (NIS) Ser. Math. Inform. Vol. 33, No 5 (2018), 751-771, <https://doi.org/10.22190/FUMI1805751K>

### *Papers in Congresses*

1. S. Kotsios – N. Kalouptsidis [THE MODEL MATCHING PROBLEM FOR A CERTAIN CLASS OF NONLINEAR SYSTEMS](#). Proceedings of the 30th Conference on Decision and Control Brighton, England 1991, pages 1809-1810.
2. S. Kotsios – N. Kalouptsidis [THE ADAPTIVE CONTROL FOR A CERTAIN CLASS OF NONLINEAR SYSTEMS](#). Proceedings of IEEE Mediterranean Symposium on new Directions in Control Theory and Applications, Crete 1993.
3. S. Kotsios [A DESCRIPTION OF 2-D DISCRETE POLYNOMIALS NONLINEAR SYSTEMS](#). Proceedings of the second Greek Symposium on Nonlinear Systems, Fractals and Chaos, Xanthi 1994.
4. S. Kotsios – Y. Bakopoulos [NONLINEAR DYNAMICS OF DISCRETE SYSTEMS WITH DISCONTINUITY](#). Proceedings of the third Greek symposium on Nonlinear Systems, Fractals and Chaos, Xanthi 1995.
5. S. Kotsios [A SYSTEM APPLICATION OF THE STAR-PRODUCT](#). Third European Control Conference, ECC95, 1995, Rome, Italy.
6. S. Kotsios – O. Feely [A CONTRIBUTION TO THE SYMBOLIC DYNAMICS OF THE DOUBLE ΣΔ-MODULATORS](#). The 4th Workshop on Nonlinear Dynamics of Electronic Systems, Seville, Spain, 1996.
7. S. Kotsios [A FACTORIZATION OF NONLINEAR DISCRETE SYSTEMS AND ITS APPLICATIONS](#). 10 Congress on Systems and Signals of the Naval Academy, Pireus 1996.
8. S. Kotsios [SOME FACTORIZATIONS OF SPECIAL NONLINEAR DISCRETE SYSTEMS AND THEIR APPLICATIONS](#). Fourth European Control Conference, ECC97, 1997, Brussels, Belgium.
9. S. Kotsios [BIBO STABILITY OF SPECIAL NONLINEAR DISCRETE SYSTEMS](#). EURICSON 98, 1998, Athens, Greece.
10. Στ. Κώτσιος – Διον. Λάμπας [CONTRIBUTION TO THE STUDY OF NONLINEAR DISCRETE SYSTEMS](#) . 17<sup>th</sup> Congress of the Greek Mathematical Society, 2000, Athens.
11. P.E.Petrakis – S. Kotsios [«Growth, Entrepreneurship and Risk: The positive connection»](#), Globalization and Entrepreneurship: Fears, Challenges and Opportunities Conference, Croatia, (24 – 26 April 2003).
12. P.E.Petrakis – S. Kotsios [«Growth, Entrepreneurship and Risk»](#), European Association for Research in Industrial Economics - Earie 2003 Conference, Helsinki, (24-26/8/2003)
13. P.E.Petrakis – S. Kotsios [«The effects of Risk on Growth, Equilibrating and Creative entrepreneurial events»](#), Metu International Conference in Economics VII, Ankara, Turkey, (5-7 August 2003).

14. St.Kotsios [FACTORIZATION AND BIBO STABILITY OF CERTAIN DISCRETE VOLTERRA SYSTEMS](#). 11th Mediterranean Conference on Control and Automation - MED'03-RHODES, GREECE, 2003.
15. P.E.Petrakis - S. Kotsios [«The analysis of the relation of Growth, Entrepreneurship and Risk over Business Cycles»](#), International Network for Economic Research (INFER) Annual Conference 2003-Determinants of Growth and Business Cycles: Theory, Empirical Evidence and Policy Implications, Giessen, Germany, (5-6 August 2003).
16. P.E.Petrakis - S. Kotsios [«The analysis of the relation of Growth, Entrepreneurship and Risk»](#), RENT XVII-Research in Entrepreneurship and Small Business Conference, Lodz, Poland, (20-21 November 2003).
17. S.Kotsios [THE PROBLEM OF POSITIVE DEFINITENESS THROUGH A FORMAL FACTORIZATION OF POLYNOMIALS](#). HERCMA 2003, ATHENS.
18. P.E.Petrakis - S. Kotsios [«Growth, Entrepreneurship and Uncertainty»](#), 3rd International Symposium Economy 2004, Bulgaria, (14-17 September 2004), 47 σελ.
19. I. Karafyllis - S. Kotsios. [CONDITIONS FOR GLOBAL ASYMPTOTIC STABILIZATION OF DISCRETE-TIME SYSTEM](#). NOLCOS2004, Munich.
20. S.Kotsios (Chairman) [A MODEL MATCHING ALGORITHM FOR A CLASS OF NONLINEAR DISCRETE SYSTEMS. A SYMBOLIC APPROACH](#). CDC-ECC 2005, Seville, SPAIN.
21. George Athanassiou , Iasson Karafyllis, Stelios Kotsios ["PRICE STABILIZATION USING BUFFER STOCKS"](#), 5th Conference on Research on Economic Theory and Econometrics Rethymnon, 10-13 July 2006.
22. Stelios Kotsios [An Algorithm For Designing Feedback Stabilizers of Nonlinear Polynomial Systems](#) Proceedings of the 15<sup>th</sup> Mediterranean Conference on Control and Automation, July 27-29, 2007, Athens, Greece.
23. Stelios Kotsios [THE LINEAR FACTORS OF NONLINEAR DISCRETE SYSTEMS WITH CROSS-PRODUCTS AND THEIR APPLICATION TO THE MODEL MATCHING PROBLEM](#). Proceedings of the European Control Conference 2007 Kos, Greece, July 2-5, 2007
24. Hassan Ugail, Akshai Aggarwal, Yannis Bakopoulos, Stelios Kotsios [Description of 3D Morphology using the Concept of the Divider Set](#) Accepted for publication in [CyberWorlds 2008](#) September 2008.
25. Ugail H, Aggarwal A, Bakopoulos Y and Kotsios S (2008): ["The Divider Set of Explicit Parametric Geometry"](#), Cyberworlds 2008, IEEE Computer Society ISBN: 978-0-7695-3381-0, pp. 232-239.
26. S.Kotsios, D.Pissas [Effectiveness of the Cutoff Audit Rule and Inequality of Income](#) 10 National Congress on Applied Mathematics and Operational Research, Athens 2011.
27. Stelios Kotsios, Dionyssios Lappas ["Linear Similarity of Nonlinear Polynomial Discrete Systems. An Algebraic Approach."](#) Conference of Modern Mathematical Methods in Science and Technology (M3ST), 2012-08-26 at Kalamata, Greece.
28. Ilias Kostarakos-Stelios Kotsios, ["LINEAR FEEDBACK METHODS AND PUBLIC DEBT"](#) presented at 6th PhD Conference in Economics 2013, 16-17 September 2013, Athens, Greece.

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#### **C.4. PAPERS UNDER REVIEWING**

1. E. Camouzis – St. Kotsios. “[Necessary and Sufficient Conditions for Debt Sustainability. True or a Paradox?](#)” Under Reviewing at INTERNATIONAL JOURNAL OF DIFFERENCE EQUATIONS.
2. V. Spyraakis – St. Kotsios. “[Public Debt Dynamics: The Interaction with National Income and Fiscal Policy](#)” Under Reviewing at Journal of Economic Structures.
3. Ilias Kostarakos-Stelios Kotsios, “[A Computational Approach to Fiscal Policy Design](#)” Under Reviewing at COMPUTATIONAL ECONOMICS.

#### **C.5. WORKING PAPERS**

1. Akshai Aggarwal, Yannis Bakopoulos, Stelios Kotsios [SKELETONS OF DISCRETE CELL SETS PART I: The Divider of two points.](#)
2. St. Kotsios and N. Kalouptsidis [ADAPTIVE CONTROL FOR A CERTAIN CLASS OF NONLINEAR DISCRETE SYSTEMS.](#)



3. St. Kotsios “THE FORMAL LINEAR LIKE FACTORIZATION OF MULTIVARIABLE POLYNOMIALS AND ITS APPLICATIONS.”
4. Ilias Kostarakos-Stelios Kotsios, “Fiscal Policy in the Presence of Time-Varying Parameters”.

## ***B.6. ARTICLES IN GREEK***

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## ***B.7. BOOKS AND NOTES IN GREEK***

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2. St. Kotsios – G. Athanasiou. **Notes on Calculus of Several Variables for Economists**. University of Athens.(2007)
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