

CURRICULUM VITAE

Konstantinos D. Karamanos

Athens Science and Educational Laboratory (ASEL)
Section of Natural Sciences, Technology and Environment
National and Kapodistrian University of Athens
4, Marasli Street,
Marasleion Heritage
GR-10676, Athens, Greece
kkaraman@ulb.ac.be
koskaraman@gmail.com

Education:

University of Athens (Greece) B.S. (Physics) 1993
(thesis supervisor: Nikolaos Antoniou)

Ecole Normale Supérieure de Cachan (France) M.Sc.
(Physical Chemistry) 1995
(thesis supervisor: Bernard Sapoval, Max Kolb)
(collaboration: Benoit Mandelbrot, Robert Brizzi)

Université Libre de Bruxelles (Belgium) M.Sc. (Mathematical Physics) 2001
(thesis supervisor: Gregoire Nicolis)

Université Libre de Bruxelles (Belgium) Ph.D. (Mathematical Physics) 2002
(thesis supervisor: Gregoire Nicolis)

Fellowship/Research Appointments:

Université Libre de Bruxelles Doctoral Starting Grant, March 1996
Université Libre de Bruxelles (with Gregoire Nicolis)

NATO Doctoral Fellow, 1996-1999
Université Libre de Bruxelles (with Gregoire Nicolis)

Petsalys-Lepage Foundation Doctoral Fellow, 1999-2000
Université Libre de Bruxelles (with Gregoire Nicolis)

Université Libre de Bruxelles Doctoral Fellow, 2002
Université Libre de Bruxelles (with Gregoire Nicolis)

“Pythagoras” National Postdoctoral Fellow, 2004-2005
University of Athens (with Kostas Eftaxias)

IKY (National Scholarship Foundation) Foundation
Postdoctoral Fellow, 2005-2007
University of Athens (with Kostas Eftaxias)

DePaul University Research Fellow, February 2007-June 2007
DePaul University, Chicago (with John Kozak)

Senior Research Assistant July 2007-March 2008
University of Athens (with Kostas Eftaxias)

Senior Research Assistant Jan 2009-Sept 2009
University of Athens (with Fotis Diakonos)

Qualia Corp. Researcher/Partner, March 2012 (Running)
University of Athens/Qualia Inc. (with Fotis Diakonos)

External visiting grants:

Camille Liegeois Travel Grant, August 2003
Royal Academy of Sciences, Brussels, Belgium

Simon Fraser University Visiting Grant (CoLab), August 2003
Centre for Experimental and Constructive Mathematics (CECM),
Simon Fraser University, Canada (with Jon Borwein)

NSERC Visiting Grant, August 2003
Wilfrid Laurier University, Canada (with Ilias Kotsireas)

Aristotelian University of Thessaloniki Visiting Grant, March 2006
University of Thessaloniki, Greece (with Elias Aifantis)

IHES (Institut des Hautes Etudes Scientifiques)
Visiting Grant – April 2008

Universite Libre de Bruxelles Visiting Grant, June 2008
Universite Libre de Bruxelles (with Gregoire Nicolis)

NSERC Visiting Grant, June 2008
Wilfrid Laurier University, Canada (with Ilias Kotsireas)

NSERC Visiting Grant, November 2008
Wilfrid Laurier University (with Ilias Kotsireas)

Universite Libre de Bruxelles Visiting Grant, June 2009
Universite Libre de Bruxelles (with Gregoire Nicolis)

Universite Libre de Bruxelles Visiting Grant, August 2009
Universite Libre de Bruxelles (with Nicolas Cerf)

IHES (Institut des Hautes Etudes Scientifiques)
Visiting Grant – January 2010

Universite Libre de Bruxelles Visiting Grant, January 2010
Universite Libre de Bruxelles (with Gregoire Nicolis)

Teaching Positions:

October 1995- Feb 1996	Teaching assistant, Academic Course “Adaptive Filtering”, Groupe Ecole Superieure d’Ingenieurs en Electrotechnique et Electronique (ESIEE, France), Signal Processing Departement, Paris, France
July 1997	Invited talk entitled “Introduction to Nonlinear Science”, 3 rd Cycle Thematic School, National Research Center for Physical Sciences (NRCPS) Demokritos, Athens, Greece
March 1999	Invited talk entitled “From symbolic dynamics to a digital approach”, Seminar of Mathematical Logic 3 rd Cycle Fonds de Recherche Scientifique (FNRS, Begium) University of Mons-Hainaut (UMH) and Universite Libre de Bruxelles (ULB), Brussels, Belgium
February 2001 – Sept 2001	Teaching assistant, Academic Course “General Physics”, Faculty of Applied Sciences, Universite Libre de Bruxelles (ULB),

Brussels, Belgium

March 2010

Invited talk, entitled “New Trends in Symbolic Dynamics”,
Complex Systems and Applications Network (COSA) Seminars of Nonlinear Science, 3rd Cycle Thematic School,
National Research Center for Physical Sciences (NRCPS) Demokritos,
Athens, Greece

December 2012

Invited talk, entitled “Symbolic Dynamics and Entropy Analysis”,
Complex Systems and Applications Network (COSA) Seminars of Nonlinear Science, 3rd Cycle Thematic School,
Seminar in Memory of the late J.S. Nicolis,
National Research Center for Physical Sciences (NRCPS) Demokritos,
Athens, Greece

12 December 2012

Invited talk, entitled “Introduction to Deterministic Chaos”,
Retired Scientists Thematic School,
National Research Center for Physical Sciences (NRCPS) Demokritos,
Athens, Greece

26 April 2013

Invited talk, entitled “Introduction to Symbolic Dynamics,” Academic course “Nonlinear Dynamical Systems,”
3rd Cycle Thematic School,
Physics Department, National and Kapodistrian University of Athens,
Athens, Greece

Pedagogical experience:

Erasmus students (1):

D. Nicoli [University of Patras, now B.Sc.]
[Universite Libre de Bruxelles (ULB), Co-supervision with G. Nicolis]

Diploma theses supervision (9): [In Construction]

- D. Dakopoulos [now Dr.]
[University of Athens (UOA), Co-supervision with K. Eftaxias]
- K. Aloupis [now M.Sc.]
[University of Athens (UOA), Co-supervision with K. Eftaxias]
- L. Athanasopoulou [now M.Sc., Ph.D. Candidate]
[University of Athens (UOA), Co-supervision with K. Eftaxias]
- C. Papadimitriou [now M.Sc. Candidate]
[University of Athens (UOA), Co-supervision with K. Eftaxias]
- M. Kalimeri [now M.Sc., Ph.D. Candidate]
[University of Athens (UOA), Co-supervision with K. Eftaxias]
- S. Mavridis [now M.Sc.]
[University of Athens (UOA), Co-supervision with K. Eftaxias]
- A. Basdekis [now B.Sc.]
[University of Athens (UOA), Co-supervision with K. Eftaxias]
- N. Kannelias [now B.Sc.]
[University of Athens (UOA), Co-supervision with K. Eftaxias]
- P. Papaspirou [now M.Sc., Ph.D. Candidate]
[University of Athens (UOA), Co-supervision with X. Moussas]

Collaboration – but not supervision – of M.Sc. students (8):

- S. Nikolopoulos [now Ph.D. holder]
[National Technical University of Athens (NTUA), Supervisor: K. Hizanides]
- L. Athanasopoulou [now M.Sc., Ph.D. Candidate]
[National Technical University of Athens (NTUA) & NRCPS Demokritos.
Supervisor: Y. Almirantis]
- M. Kalimeri [now M.Sc., Ph.D. Candidate]
[National Technical University of Athens (NTUA), Supervisor: V. Constantoudis]
- I. Kapsomenakis [now M.Sc., Ph.D. Candidate]
[University of Athens (UOA), Supervisor: F. Diakonou]

- P. Papaspirou [now M.Sc., Ph.D. Candidate]
[University of Athens (UOA), Co-supervision with X. Moussas]
- S. Mavridis [now M.Sc.]
[National Technical University of Athens (NTUA), Co-supervision with K. Eftaxias]
- C. Papadimitriou [now M.Sc. Candidate]
[University of Athens (UOA), Supervisors: G. Balasis & K. Eftaxias]
- S.I. Mistakidis [now M.Sc. Candidate]
[University of Athens (UOA) and University of Hambourg,
Supervisors: A. Karanikas & P. Schmelcher]

Collaboration – but not supervision – of Ph.D. students (6): [In construction]

- P. Kapisiris [now Ph.D. candidate]
[University of Athens (UOA) & Athens Technological Institution (TEI Athens),
Supervisors: K. Eftaxias & K. Nomicos]
- S. Nikolopoulos [now Dr.]
[National Technical University of Athens (NTUA), Supervisor: K. Hizanides]
- P. Papaspirou [now M.Sc., Ph.D. Candidate]
[University of Athens (UOA), Supervisor: X. Moussas]
- A. Gkiolmas [now Dr.]
[University of Athens (UOA), Supervisor: C. Skordoulis]
- M. Kalimeri [now M.Sc., Ph.D. Candidate]
[Universite Paris VII – Denis Diderot]
- L. Athanasopoulou [now M.Sc., Ph.D. Candidate]
[University of Ljubljana – Slovenia]

Scientific awards, prizes, distinctions:

June 1993	B.S. Degree Excellence Prize (8,70/10)
Sept 1999	Van Buuren Foundation Scientific Prize Universite Libre de Bruxelles

August 2000	Session's Chairperson in the colloquium Computing Anticipatory Systems 2000 (CASYS'2000, Belgium) Liege, Belgium
January 2002	Institut des Hautes Etudes Scientifiques (IHES, Paris, France) Short-term Visitor Invited by M. Gromov
May 2003	Camille Liegeois Travel Grant (Royal Academy of Sciences, Belgium) Invited by J.M. Borwein
November 2005	Nominated Member of the American Chemical Society (ACS)
January 2007	Over 8 refereed Invited papers in International conferences
April 2008	Institut des Hautes Etudes Scientifiques (IHES, Paris, France) Long-term Visitor
June 2008	Nominated Member of the American Institute of Chemical Engineering (AIChE)
August 2009	Nominated Member of the Emerald Literati Club, Emerald Publishers, England
August 2009 Computing	Session's Chairperson in the colloquium Anticipatory Systems 2009 (CASYS'2009, Belgium) Liege, Belgium
August 2009	Best paper Award (with the Crystal Belgium) for Proceedings paper [5] below, in the colloquium Computing Anticipatory Systems 2009 (CASYS'2009) Liege, Belgium
January 2010	Papers [1], [8], [18] below are cited in Wolfram MathWorld, in the Lemmas "Binary Carry Sequence", "Logistic Map", and "Feigenbaum Constants" maintained by Wolfram Research, USA
January 2010	Papers [1], [4], [8] below are cited in the

On-Line Encyclopedia of Integer Sequences
maintained by OEIS Foundation, USA

January 2010

Institut des Hautes Etudes Scientifiques
(IHES, Paris, France) Medium-term Visitor

June 2010

Paper [22] below, is cited among the top
25 hottest articles in *Physica A* for the
period April 2010 – June 2010

Nov 2010

Paper [23] below, entered in the Virtual
Journal of Biological Physics Research

May 2011

Paper [9] below, entered in the collective
Book titled “[Models and Applications of
Chaos Theory in Modern Sciences](#)”, edited
by Dr. Elhadj Zeraouia, Science Publishers,
USA

Oct 2011

Paper [24] below, highlighted in *Journal of
Technology and Science, Vertical News
Mathematics* (11 Oct 2011), USA

Dec 2011

Paper [25] below, figures in the inaugural
Issue of the *Int. J. Inform. Eng.*, USA

March 2013

Inclusion to Marquis’ “Who’s Who” in the
World

September 2013

Paper [26] below, highlighted in the book
“*Issues in Artificial Intelligence, Robotics
and Machine Learning: 2013 Edition*”, Q.
Ashton Acton (Gen. Ed.), Scholarly Editions,
Atlanta, Georgia, USA

Record of Scholarship:

1. “Symbolic dynamics and entropy analysis of Feigenbaum limit sets.”
K. Karamanos and G. Nicolis
Chaos, Solitons & Fractals 10(7), 1135-1150 (1999)

2. “Can one hear the shape of an electrode ? Active zone in Laplacian Transfer. I, Numerics.”
B. Sapoval, M. Filoche, K. Karamanos and R. Brizzi
Eur. Phys. J. B 9, 739-753 (1999)
3. “From symbolic dynamics to a digital approach: chaos and transcendence.”
K. Karamanos
M. Planat (Ed.)
Lect. Notes Phys. 550, 357-371 (2000)
[Invited paper]
4. “From symbolic dynamics to a digital approach.”
K. Karamanos
Int. J. Bif. Chaos 11(6), 1683-1694 (2001)
5. “Dissipation in Laplacian Fields across irregular boundaries.”
K. Karamanos, G. Nicolis, T. Massart and P. Bouillard
Phys. Rev. E 64, 0111151-15 (2001)
6. “Entropy analysis of substitutive sequences revisited.”
K. Karamanos
J. Phys. A: Math. Gen. 34, 9231-9241 (2001)
7. “A thorough numerical entropy analysis by lumping of some substitutive sequences.”
K. Karamanos and I. Kotsireas
Kybernetes 31(9/10), 1409-1417 (2002)
[Invited paper]
8. “Exact computation of the bifurcation point B4 of the logistic map and the Bailey-Broadhurst conjectures.”
I. Kotsireas and K. Karamanos
Int. J. Bif. Chaos 14(7), 2417-2423 (2004)
9. “A unified approach of catastrophic events.”
S. Nikolopoulos, P. Kapiris, K. Karamanos and K. Eftaxias
Nat. Haz. Earth Syst. Sciences 4, 615-631 (2004)
Article entered in the collective Book titled “[Models and Applications of Chaos Theory in Modern Sciences](#)”, edited by Dr. Elhadj Zeraouia, Science Publishers, USA
10. “Statistical analysis of the binary expansion of the first 1000 digits of the Feigenbaum constants alpha and delta.”
K. Karamanos and I. Kotsireas
J. Franklin Inst. 342, 329-340 (2005)

11. “Algebraic dynamics of certain Gamma function values.”
J.M. Borwein and K. Karamanos
A. Eberhard, N. Hadjisavvas, D. T. Luc (Eds.)
Nonconvex Optim. Appl. 77, 3-21 (2005)
[Invited paper]
12. “Dissipation in weakly polarizable electrodes across irregular boundaries.”
K. Karamanos
J. Non-Equil. Thermodyn. 30, 163-171 (2005)
13. “The seismological and Electromagnetic view of the critical earthquake model. Did the 7/9/1999 M5.9 Athens Earthquake come with a warning?”
P. Kapiris, K. Nomicos, G. Antonopoulos, J. Polygiannakis, K. Karamanos, J. Kopanas, A. Peratzakis and K. Eftaxias
Earth, Planets, Space 57(3), 215-230 (2005)
14. “Extracting preseismic electromagnetic signatures in terms of symbolic dynamics.”
K. Karamanos, A. Peratzakis, P. Kapiris, S. Nikolopoulos, J. Kopanas and K. Eftaxias
Nonlinear Processes in Geophysics 12, 835-848 (2005)
15. “A unified approach to catastrophic events: from the normal state to geological or biological shock in terms of spectral fractal and nonlinear analysis.”
K. Eftaxias, P. Kapiris, G. Balasis, A. Peratzakis, K. Karamanos, J. Kopanas, G. Antonopoulos and K. Nomicos
Nat. Haz. Earth Syst. Sciences 6, 1-24 (2006)
16. “Study of pre-seismic electromagnetic signals in terms of complexity.”
K. Karamanos, D. Dakopoulos, K. Aloupis, A. Peratzakis, L. Athanasopoulou, S. Nikolopoulos, P. Kapiris and K. Eftaxias
Phys. Rev. E 74, 016104 – 016125 (2006)
17. “Block entropy analysis of heart rate variability signals.”
K. Karamanos, S. Nikolopoulos, G. Manis, A. Alexandridi, K. Hizanides and S. Nikolakeas
Int. J. Bif. Chaos 16(7), 2093-2101 (2006)
18. “Addendum: On the Statistical analysis of the binary expansions of the Feigenbaum constants.”
K. Karamanos and I. Kotsireas
J. Franklin Inst. 343, 759-761 (2006)
19. “Statistical Compressibility Analysis of DNA Sequences by Generalized Entropy-like Quantities: Towards Algorithmic Laws for Biology?”
K. Karamanos, I. Kotsireas, A. Peratzakis and K. Eftaxias

- WSEAS Trans. Syst. 5(11), 2503-2513 (Nov 2006)
 Comments and Corrections.
 WSEAS Trans. Syst. 6(1), 242 (Jan 2007)
 [Invited paper]
20. “Evidence of fractional-Brownian-motion-type asperity model for earthquake generation in candidate pre-seismic electromagnetic emissions.”
 K. Eftaxias, Y. Contoyiannis, G. Balasis, K. Karamanos, J. Kopanas,
 G. Antonopoulos, G. Koulouras and K. Nomicos
 Nat. Haz. Earth Syst. Sci. 8, 657-669 (2008)
 21. “Characterizing Cantorian sets by entropy-like quantities.”
 K. Karamanos
 Kybernetes 38(6), 1025-1032 (2009)
 22. “Nonlinear Statistical Analysis of Natural Language Written Texts.”
 C. Papadimitriou, K. Karamanos, F.K. Diakonou, V. Constantoudis and
 H.Papageorgiou
 Physica A 389, 3260-3266 (2010)
 23. “Scaling Laws and Fractality in the distribution of coding segments in eukaryotic genomes revealed through a block entropy approach.”
 L. Athanasopoulou, S. Athanasopoulos, K. Karamanos and Y. Almirantis
 Phys. Rev. E 82, 051917 (2010) [9 pages]
 Also:
 Virtual Journal of Biological Physics Research (Nov 2010)
 24. “Recent developments in the Digital Approach of Symbolic Dynamics.”
 K. Karamanos, A. Gkiolmas and C. Skordoulis
 Kybernetes 40(5/6), 921 - 925 (2011)
 Also:
 Highlighted in Journal of Technology and Science, Vertical News Mathematics,
 USA (11 Oct 2011)
 25. “Illuminating the Poincare Recurrence Theorem with Information Technology.”
 I.S. Mistakidis, S.I. Mistakidis and K. Karamanos
 Int. J. Infor. Eng. 1(1), 7-19 (Dec 2011)
 26. “The many facets of Poincare Recurrence Time Theorem of the logistic map.”
 K. Karamanos, I.S. Mistakidis and S.I. Mistakidis
 Kybernetes 41(5/6), 794-803 (2012)
 Highlighted in the book “Issues in Artificial Intelligence, Robotics and Machine Learning: 2013 Edition”, Q. Ashton Acton (Gen. Ed.), Scholarly Editions, Atlanta, Georgia, USA (2013)

27. "Aspects of Arithmetic Experiments with Escape Time Statistics."
I.S. Mistakidis, K. Karamanos and S.I. Mistakidis
Int. J. Infor. Eng. 2(3), 97-104 (Sept 2012)
28. "Entropy Analysis of Word-length Series of Natural Language Texts: Effects of Text Language and Genre."
M. Kalimeri, V. Constantoudis, C. Papadimitriou, K. Karamanos, F.K. Diakonou, H. Papageorgiou
Int. J. Bif. Chaos 22(9), 1250223 (8-pages) (Sept 2012)
29. "Ecosystem Foods Webs as Dynamic System: Educating Undergraduate Teachers in Conceptualizing Aspects of Food Webs' Systemic Nature and Comportment."
K. Karamanos, A. Gkiolmas, A. Chalkidis, M. Papaconstantinou, D. Stavrou and C. Skordoulis
Adv. Syst. Sci. and Appl. 12(4), 353-372 (2012)
30. "Statistical versus optimal partitioning for block entropies."
I.S. Mistakidis, K. Karamanos and S.I. Mistakidis
Kybernetes 42(1), 35-54 (Jan 2013)
31. "Using the simulations of NetLogo as a tool for introducing Greek High-School Students to eco-systemic thinking."
A. Gkiolmas, K. Karamanos, A. Chalkidis, M. Papaconstantinou, D. Stavrou and C. Skordoulis
Adv. Syst. Sci. and Appl. 13(3), 276-298 (2013)
32. "Symbol-to-symbol correlation function at the Feigenbaum Point of the logistic map."
K. Karamanos, I.S. Mistakidis and S.I. Mistakidis
Int. J. Bif. Chaos 23(7), 1350118 (2013) (14 pages)
CARMA Lab. Preprint
33. "Entropy production of entirely diffusional Laplacian transfer and the possible role of fragmentation of the boundaries."
K. Karamanos, S.I. Mistakidis, T.J. Massart and I.S. Mistakidis
Submitted to Fractals (2013)
34. "Structure of the correlation function at the accumulation points of the logistic map."
K. Karamanos, I.S. Mistakidis and S.I. Mistakidis
Submitted to Int. J. Bif. Chaos (2013)
CARMA Lab. Preprint

Refereed Proceedings of International Conferences:

1. “Entropy Analysis of Automatic Sequences Revisited: an Entropy Diagnostic for Automaticity.”
K. Karamanos
D. Dubois (Ed.)
AIP Conference Proceedings 573, 278-284 (2001)
[Invited paper]
2. “Towards Large-Scale Entropy Computations.”
K. Karamanos and I. Kotsireas
D. Dubois (Ed.)
AIP Conference Proceedings 718, 385-391 (2004)
[Invited paper]
3. “Block Entropy Analysis of long recorded Electrocardiograms as a good way for discrimination between Normal Subjects and Coronary Patients.”
K. Karamanos, S. Nikolopoulos and K. Hizanides
D. Dubois (Ed.)
Int. J. of Comp. Anticip. Syst. 15(1), 57-71 (2004)
[Invited paper]
4. “Detailed Study of the ergodic properties of the relaxation phase of nonchaotic one-dimensional maps.”
Special Volume in honor of Mitchell J. Feigenbaum
K. Karamanos, I. Kapsomenakis and F.K. Diakonos
D. Dubois (Ed.)
Int. J. of Comp. Anticip. Syst. 17(2), 239-253 (2006)
[Invited paper]
5. “Recycling the Independent Field Approximation Argument in the Far Field.”
K. Karamanos
D. Dubois (Ed.)
AIP Conference Proceedings 1303, 45 (2010)
Proceedings of Computing Anticipatory Systems 2009
(CASYS’2009, 3-8 August 2009, HEC Liege, Belgium)
Best Paper Award with the Crystal Belgium
IHES preprint: Theoretical Physics P-08-26 (April 2008)
[Invited paper]
6. “The programming environment of NetLogo as a tool for introducing Greek High-school students to ecosystemic thinking.”
A. Gkiolmas, A. Chalkidis, D. Stavrou, K. Karamanos and C. Skordoulis
P. Chantzoglou (Ed.)
Proceedings of the 5th National and International Conference of the Hellenic Society for Systemic Studies (HSSS), June 24-27, Xanthi, Greece, pp. 474-489

(2010)

7. “Teaching of/with Agent-Based Models in the Social Sciences.”
A. Gkiolmas, A. Chalkidis, A. Papaconstantinou, D. Stavrou, K. Karamanos and
C. Skordoulis
Video contribution to the Proceedings of the MAPS-2 Conference, 8-9 April
2010, ENS ULM (Ecole Normale Superieure, rue d'Ulm) Paris, France (2010)
8. “A constructionist Method Used for the purpose of Teaching Theachers About
Basic Properties of Complex Adapptive Systems, By the use of A NetLogo
Model.”
A.Gkiolmas, A. Chalkidis, K. Karamanos, M. Papaconstantinou and C. Skordoulis
Constructionism 2012 Conference Proceedings, pp. 270-280,
C. Kynigos, J.E. Clayson and N. Yiannoutsou (Eds.),
Vivliosynergatiki S.A., Athens (2012)
9. “Comparison of Astronomical Instruments through the Ages.”
P. Papaspirou, X. Moussas and K. Karamanos, to appear (2013)

Recent manuscripts– Unpublished:

1. “Computing the bifurcation points and the superstable orbits
of the logistic Map.”
I. Kotsireas and K. Karamanos
(Under Revision)
2. “Grobner bases and the logistic map.”
I. Kotsireas and K. Karamanos
(Under Revision)

Technical Reports – Unpublished:

1. “Fractal Structure of the block-complexity function.”
K. Karamanos and I. Kotsireas
IHES preprint: Mathematics M-08-24 (April 2008)

Refereed Proceedings of International Conferences, in Greek:

1. “From Symbolic Dynamics to a Digital Approach:
Complexity, Chaos and Transcendence.”
Special Volume in Honor of Gregoire Nicolis
K. Karamanos

Order and Chaos in Nonlinear Dynamical Systems Book Series,
6, 321-325 (2000)

2. “Dissipation in Laplacian Fields across irregular boundaries.”
K. Karamanos
Order and Chaos in Nonlinear Dynamical Systems Book Series,
7, (2002).

Extended abstracts:

1. “Some aspects of symbolic dynamics of Feigenbaum limit sets.”
K. Karamanos
[Ecole Jeunes Chercheurs en informatique: Algorithmique et Calcul Formel](#),
Section Theorie des Nombres,
22-26 March (1999), LaBRI, University Bordeaux 1, Bordeaux, France
<http://www.labri.fr/perso/weil/evolegdr/>
2. “Block Entropy Analysis of some DNA Strings.”
K. Karamanos, I. Kotsireas and V. Basios
ADN et chromatine: aux frontières de la biologie, de la biophysique et de la
génomique
23-29 March (2002), Arcachon, Bordeaux, France
<http://adn.crpp.u-bordeaux.fr>
3. “Approaching Geophysical and Biological Catastrophes.”
K. Karamanos and K. Eftaxias
8-13 August (2005), CASYS’2005, HEC Management School, Liege, Belgium
<http://www.ulg.ac.be/mathgen/CHAOS/CASYS2005.htm>
4. “Extracting preseismic VLF-VHF electromagnetic signatures: A possible way
in which the critical regime is reached as the earthquake approaches.”
K. Eftaxias, P. Kaporis, K. Karamanos, G. Balasis and A. Peratzakis
Fall Meeting AGU
Eos Trans. AGU, Fall Meet. Suppl. 86(52), (2005)
5. “Study of Preseismic Electromagnetic Signals in terms of T-complexity.”
K. Karamanos, M. Titchener, K. Aloupis, D. Dakopoulos, P. Kaporis, A.
Peratzakis and K. Eftaxias
Geophysical Research Abstracts 7, 00556 (2005)
6. “Recurrence and Escape Time Statistics in Electromagnetic Precursors.”
K. Karamanos, L. Athanasopoulou and A. Peratzakis
Geophysical Research Abstracts 8, 02153 (2006)

7. "Evidence of a self-affine asperity fault model in preseismic electromagnetic activity."
K. Eftaxias, Y. Contoyiannis, K. Karamanos, M. Kalimeri, G. Balasis, J. Kopanas, G. Antonopoulos and K. Nomicos
Geophysical Research Abstracts 9, 04829 (2007)
8. "Search for signatures that imply the transition earthquake nucleation by means of Complexity."
K. Karamanos, K. Nomicos and K. Eftaxias
Geophysical Research Abstracts 9, 04830 (2007)
9. "Entropy Study of a proper "word length" for catastrophic events."
K. Karamanos, C. Papadimitriou, M. Kalimeri, L. Athanasopoulou and K. Eftaxias
Geophysical Research Abstracts 9, 04836 (2007)
10. "Detrended fluctuation analysis of pre-seismic electromagnetic emissions."
S. Nikolopoulos, K. Karamanos and K. Eftaxias
EGU General Assembly 2008
Geophysical Research Abstracts 10, EGU2008-A-01567 (2008)
11. "A multidisciplinary analysis of MHz-kHz pre-seismic emissions associated With recent significant earthquakes in Greece."
S. Nikolopoulos, K. Karamanos and K. Eftaxias
EGU General Assembly 2009
Geophysical Research Abstracts 11, EGU2009-A-2431 (2009)
12. "A Unified Approach to Catastrophic Events."
L. Athanasopoulou, K. Karamanos and K. Eftaxias
Computing Anticipatory Systems 2009 (CASYS'2009)

Organizership:

- ☞ Principal co-organizer (with K. Eftaxias) of a Regular Seminar on Complex Systems, University of Athens (2004-2005)
- Member of the International Program Committee CASYS'2005
<http://www.ulg.ac.be/mathgen/CHAOS/CASYS2005.htm>
- Member of the International Program Committee CASYS'2007
<http://www.ulg.ac.be/mathgen/CHAOS/CASYS2007.htm>
- Member of the International Program Committee CASYS'2011

<http://www.ulg.ac.be/mathgen/CHAOS/CASYS2011.htm>

- Member of the International Program Committee CASYS'2014
<http://www.ulg.ac.be/mathgen/CHAOS/CASYS2014.htm>
[Scheduled]

Honorary Organizerships:

- Member of the International Scientific Committee of the 11th WSEAS International Conference on Systems
<http://www.wseas.org/conferences/2007/greece/iccomp/committee.htm>
- Member of the International Scientific Committee of the 11th WSEAS International Conference on Computers
<http://www.wseas.org/conferences/2007/greece/iccomp/committee.htm>
- Member of the International Scientific Committee of the 6th WSEAS International Conference on Data, Networks, Communications and Computers (DNCOCO 2007)
<http://www.wseas.org/conferences/2007/tt/dncoco/>
- Member of the International Scientific Committee of the 9th WSEAS International Conference on Mathematical and Computational Methods in Science and Engineering (MACMESE'2007)
<http://www.wseas.org/conferences/2007/tt/macmese/>
- Member of the International Scientific Committee of the 12th WSEAS International Conference on Computers
<http://www.wseas.org/conferences/2008/greece/iccomp/>

Editorial Board Member:

- Scientific Research and Essays (SRE) [An ISI Ranked Journal]
<http://www.academicjournals.org/SRE>
[Term: Jan 2006 – now]
- International Scholarly Research Network (ISRN) Applied Mathematics, Hindawi Journals [A MathSciNet Ranked Journal]
<http://www.isrn.com/journals/appmath/>
[Term: June 2011 – now]

- Scientific Inquiry,
IIGSS Journals,
<http://www.iigss.net/>
[Term: 2006 – now]
- Advances in Systems Science and Applications (ASSA, USA)
IIGSS Journals [A Scopus Ranked Journal]
[Term: Sept 2012 – now]

Referee:

- Theoretical Computer Science (TCS) (1)
- AIP Conference Proceedings (3)
- International Journal of Computing Anticipatory Systems (IJCAS, Liege) (3)
- Journal of the Franklin Institute (JFI) (2)
- European Community Marie Curie Actions (FP-6, Brussels)
- Europhysics Letters (EPL) (1)
- Tectonophysics (1)
- NEST evaluator (FP-6, 2006)
- Acta Geodynamica and Geomaterialia (Prague) (1)
- Physics Letters A (1)
- Physica A (1)
- Scientific Research and Essays (SRE, Lagos Nigeria) (3)
- European Community Marie Curie Actions (FP-7, Brussels)
- Journal of Mathematical Physics (JMP, USA) (1)
- International Journal of Bifurcation and Chaos (IJBC) (1)
- Natural Hazards and Earth System Science (NHES, Europe) (2)
- Int. J. Math. and Math. Sci. (IJMMS) (1)
- Reviewer for E-book Series: Lecture Series in field of Communication Engineering, Bentham Science Publishers (1)
- ISRN Applied Mathematics (12)
- Journal of Applied Research and Technology (JART, Mexico) (1)
- Journal of Civil Engineering and Construction Technology (JCECT, Lagos Nigeria) (2)
- Journal of Applied Mathematics (1)
- Science Journal of Electrical and Electronic Engineering (1)
- Communications in Cybernetics, Systems Science and Engineering, CRC Book Series, Taylor and Francis (1)
- Journal of Artificial Societies Social Simulation (Surray, UK) (JASSS) (1)
- Advances in Systems Science and Applications (ASSA, USA) (2)
- Kybernetes (3)

Various:

- Contributor of the sequences A035263, A181406, both
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<http://oeis.org/>
- Member of the Hellenic National Research Foundation Library.