

CURRICULUM VITAE

Konstantinos D. Karamanos

Technological & Educational Institute of Athens
Departement of Energy Technology
Aghiou Spyridona 17
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&
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13 Pouliou Str.,
GR-11523 Ampelokipi
Athens, Greece

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Education:

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

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

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

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

Fellowship/Research Appointments:

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

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

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

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

Universite Libre de Bruxelles Post-Doctoral Grant, 2003
Universite 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 July 2008-November 2008
University of Athens (with Kostas Eftaxias)

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

Qualia Ltd. Researcher/Partner, March 2012
University of Athens/Qualia Ltd. (with Fotis K. Diakonos)

Academy of Athens Researcher/Partner, Feb 2015 – Oct 2015
Academy of Athens/ Technological and educational institute of Athens
(with Apostolos Klinakis)

Senior Research Assistant Jan 2014-now
Technological and educational institute of Athens (with Ioannis E. Sarris)

External visiting grants (only Post-doctoral):

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, Canada (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)

NSERC Visiting Grant, July 2015
Wilfrid Laurier University, Canada (with Ilias Kotsireas)

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

Public Lecture, entitled “Introduction to
Nonlinear science”,
3rd Cycle Thematic School,
National research Center for Physical
Sciences (NRCPS) Demokritos,
Athens, Greece

April 1999

Invited Speaker, CNRS Thematic School on
“Algebraic and analytic randomness,” Proc.
*In Noise, Oscillators and algebraic
randomness, Lecture Notes in Physics,*
M. Planat Editor (Springer, 1999), Jura,
France

March 1999

Invited talk entitled “From symbolic
dynamics to a digital approach”,
Seminar of Mathematical Logic
3rd Cycle Fonds de Recherche Scientifique
(FNRS, Begium)
University of Mons-Hainaut (UMH),
Mons, Belgium
and Universite Libre de Bruxelles (ULB),
Brussels, Belgium

February 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
(COSAN) 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

4 July 2014

Public Lecture, entitled “Chaos,
The flight of the Butterfly,
Mathematics and Physics”,
“Gerostathopouleion” Astronomical
Observatory, 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., Ph.D. Candidate]
[University of Athens (UOA), Co-supervision with K. Eftaxias]
 - M. Kalimeri [now Post-Doctoral Fellow]
[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]
 - A. Matzoros [Running]
[TEI of Athens (TEIAth), Co-supervision with I.E. Sarris]

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 Post-Doctoral Fellow]
[National Technical University of Athens (NTUA), Supervisor: V. Constantoudis]
- I. Kapsomenakis [now Ph.D. holder]
[University of Athens (UOA), Supervisor: F. Diakonos]
- 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., Ph.D. Candidate]
[University of Athens (UOA) and University of Hambourg,
Supervisors: A. Karanikas & P. Schmelcher]

Collaboration – but not supervision – of Ph.D. students (9): [In construction]

- P. Kapiris [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 Post-Doctoral Fellow]
[Universite Paris VII – Denis Diderot, France]
- L. Athanasopoulou [now M.Sc., Ph.D. Candidate]
[University of Ljubljana – Slovenia, Slovenia]
- S.I. Mistakidis [now M.Sc., Ph.D. Candidate]
[University of Hambourg, Supervisor: P. Schmelcher, Germany]
- E. Karvelas [M.Sc., Ph.D. Candidate]
[University of Thessaly (UOTh) & TEI of Athens, Greece]
- N. Kefou [M.Sc., Ph.D. Candidate]
[University of Thessaly (UOTh) & TEI of Athens, Greece]

Scientific awards, prizes, distinctions:

June 1993	B.S. Degree Excellence Prize (8,70/10)
April 1998	Recognition of paper [1] below, as a “great contribution in understanding the relevant field of study”, on behalf of the Journal Chaos, Solitons & Fractals (CSF)
September 1999	Van Buuren Foundation Scientific Prize Universite Libre de Bruxelles Proposed by G. Nicolis
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 (A Prize addressing Excellent Scientists of minus of 35 years old), Universite Libre de Bruxelles & 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	Session's Chairperson in the colloquium Computing 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, Belgium) Liege, Belgium
January 2010	Papers [1],[8],[18], below are cited in Wolfram's MathWorld, maintained by Wolfram Research, USA, in the Lemmas "Binary Carry Sequence", "Logistic Map", and "Feigenbaum Constants", respectively
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 Zeraoulia, Science Publishers, USA
Oct 2011	Paper [24] below, highlighted in Journal of Technology and Science, Vertical News in 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
27 Jan 2014	Recognition of paper [32] below, as a “great contribution in understanding the relevant field of study”, on behalf of the International Journal of Bifurcation and Chaos (IJBC)
Feb 2014	Paper [8] below, is cited in Wikipedia in the Lemma “Integer Relation Algorithm (PSLQ)”
August 2014	Recognition of paper [28] below, as a “great contribution in understanding the relevant field of study”, on behalf of the International Journal of Bifurcation and Chaos (IJBC)
Jan 2015	Nominated Honorary Member of the APM Institute, Athens, Greece Proposed by Ioannis Haranas
February 2015	Joining the Editorial Board of “Mathematical Problems in Engineering”, an ISI Ranked Journal

Books:

1. “Entropy Analysis of Nonequilibrium Systems.”
K. Karamanos (Under Preparation)
Lap-Lambert Publ. Company, Dusseldorf, Germany (2016)

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
J. Forrest (Ed.)
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)
 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. Diakonos, 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. Scordoulis
Kybernetes 40(5/6), 921-925 (2011)
[DDrive Lab preprint #336 (2007)]
Also:
Highlighted in Journal of Technology and Science, Vertical News in 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)
[Invited paper]
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, and H. Papageorgiou
Int. J. Bif. Chaos 22(9), 1250223 (Sept 2012) (8 pages)
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 (July 2013) (14 pages)
CARMA Lab. Preprint
33. "Criteria for the Complexity of Successive Astronomical Paradigms."
P. Papaspiro, K. Karamanos and X. Moussas
Physics International 5(1), 92-102 (2014)
CARMA Lab. Preprint
[Invited paper]
34. "Teaching Chaos with a Pendulum."
C. Skordoulis, V. Toliass, D. Stavrou, K. Karamanos and A. Gkiolmas
Adv. Syst. Sci. and Appl. 14(2), 158 (2014)
35. "Symbolic Dynamics Applied to velocity time-series in wind farms."
K. Karamanos, I.S. Mistakidis, S.I. Mistakidis and I.E. Sarris
Adv. Syst. Sci. and Appl. 14(3), 244-253 (2014)

CARMA Lab. Preprint

36. “Word-length entropies and correlations of natural language written texts.”
M. Kalimeri, V. Constantoudis, C. Papadimitriou, K. Karamanos, F.K. Diakonou and H. Papageorgiou
Journal of Quantitative Linguistics 22(2), 101-118 (2015)
37. “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
Fractals 23(3), 1550026 (2015)
38. “Long-range correlations and burstiness in written texts: Cultural and universal aspects.”
V. Constantoudis, M. Kalimeri, F.K. Diakonou, K. Karamanos, C. Papadimitriou, E. Hadjigeorgiou and H. Papageorgiou
International Journal of Modern Physics B, in press (2015)
39. “Cross-Fertilizing Nanoscience with ideas coming from Non-Equilibrium Thermodynamics.”
K. Karamanos, E. Karvelas, N.K. Lambropoulos and I.E. Sarris
Adv. Syst. Sci. Appl., in press (2016)
40. “Structure of the Correlation Function at the accumulation points of the logistic map.”
K. Karamanos, I.S. Mistakidis and S.I. Mistakidis
Submitted to Kybernetika (Nov 2015)
CARMA Lab. Preprint
41. “An artificial Volition architecture for Autonomous Robotics.”
T.E. Raptis and K. Karamanos
Adv. Syst. Sci. Appl., in press (2016)

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. Scordoulis
P. Chantzoglou (Ed.)
To appear in the Proceedings of the 5th National and International Conference of the Hellenic Society for Systemic Studies (HSSS), 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 Supérieure, rue d’Ulm), Paris, France (2010)
 8. “A constructionist Method Used for the purpose of Teaching Teachers About Basic Properties of Complex Adaptive Systems, by the use of a NetLogo Model.”
A. Gkiolmas, A. Chalkidis, K. Karamanos, M. Papaconstantinou and C.

Skordoulis
C. Kynigos, J.E. Clayson and N. Yiannoutsou (Eds.),
Constructionism 2012 Conference Proceedings,
pp. 270-280, Vivliosynergatiki S.A., Athens, Greece (2012)

Recent manuscripts:

1. “Computing the bifurcation points and the superstable orbits of 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
T. Bountis (Ed.)
Order and Chaos in Nonlinear Dynamical Systems, 6, 321-325 (2000)
2. “Dissipation in Laplacian Fields across irregular boundaries.”
K. Karamanos
T. Bountis (Ed.)
Order and Chaos in Nonlinear Dynamical Systems, 7, (2002).

Extended abstracts:

1. “Some aspects of symbolic dynamics of Feigenbaum limit sets.”
K. Karamanos
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SCinTE 2015, "Science in Technology" 2015 International Conference, <http://www.scinte.gr/>
5-7 November 2015, National Hellenic Research Foundation (NHRF), Athens, Greece

Organizership:

- Principal organizer 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 Scientific Committee SCinTE 2015

Section 3. Applied Mechanics, Civil and Energy Engineering

5-7 November 2015, TEI Athens, Greece

<http://www.scinte.gr/>

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)
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- 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 – Feb 2014 (stopped)]
- International Scholarly Research Notices (ISRN) Applied Mathematics Hindawi Journals [A MathSciNet Ranked Journal]
<http://www.hindawi.com/journals/isrn/>
[Term: March 2014 – now]

- Scientific Inquiry
Int. Inst. Gen. Syst. Studies (IIGSS) Journals
<http://www.iigss.net/>
[Term: Jan 2006 – now]
- Advances in Systems Science and Applications (ASSA, USA)
IIGSS Journals [A Scopus Ranked Journal]
[Term: Sept 2012 – now]
- Mathematical Problems in Engineering (MPE)
Hindawi Journals [A ISI Ranked Journal]
[Term: Feb 2015 – 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 (2)
- 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) (2)
- 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, Old Series (13)
- 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 (JASSS, Surray, UK) (1)
- Advances in Systems Science and Applications (ASSA, USA) (7)

- Kybernetes (4)
- Science Journal of Physics (1)
- Journal of Theoretical Biology (1)
- China National Knowledge Infrastructure (CNKI) evaluator of Chinese Science and Technology Publications (1)
- International Scholarly Research notices (ISRN, Applied Mathematics), New Series (1)
- Fractals (1)
- Mathematical Problems in Engineering (MPE), New Series (30)
- Advisor for Special Issues, Mathematical Problems in Engineering (MPE) (10)
- Gene (1)

Various:

- Contributor of the sequences A035263, A181406, both cited in the On-Line Encyclopedia of Integer sequences (OEIS), maintained by OEIS Foundation: <http://oeis.org/>
- Member of the National Hellenic Research Foundation (NHRF) Library, Athens, Greece: <http://www.ekt.gr>