

CURRICULUM VITAE

Name: **DIMITRIS** (passport name: **DIMITRIOS**)

Surname: **KARAYANNAKIS** (passport surname: **KARAGIANNAKIS**)

Born in Athens, Greece, August 23d, 1951

Current Position

Professor of Pure & Applied Mathematics

Undergraduate & Graduate Math Program Coordinator

DEPARTMENT OF INFORMATICS ENGINEERING, TEI of CRETE, GREECE

(URL : www.ie.teicrete.gr)

Undergraduate Studies

University of Patras, Greece, 1970-1976, B.Sc in Mathematics (major) & in Physics (minor)

Graduate Studies

(a). 9/1976- 2/1979:“Specializare” (ABD): **Ordered Spaces and Theory of Distributions**),
Department of Mathematics, University of Bucharest, Roumania,

(b).3/19779-11/1979:Certificate d’ Equivalence DEA

(“dans la cadre d’ Analyse Fonctionnelle”)

6th, Univ. of Paris (Piere and Marie Curie), France,

(c).1/1980-8/1982:**M.Sc,Maths (major)& Physics (minor),**

Department of Mathematics,University of Illinois at Urbana-Champaign, USA,

(d).9/1982-5/1983&9/1984-9/1086:**PhD(HarmonicAnalysis), Department of Mathematics,**
University of Illinois at Urbana-Champaign, USA,

(e).**PostDoc,(Fall Semester1986-87), Dept. of Math. University of Illinois at U-C, USA**

(f).**Post Doc, Sabbatical (Spring Semester1999-2000), School of Math., GIT, Atlanta, USA,**

LIST OF PUBLICATIONS (Spring 2018)

List of Publications in International Journals & Refereed Proceedings

1. **D. Karayannakis**, “Spectral decompositions of one-parameter groups of isometries on Hardy Spaces”, **Trans. A.M.S**, V.311,no 1, 1989, pp.147-166
2. **D. Karayannakis**, “Spectral decompositions of hyperbolic isometric groups in Hardy spaces of the disk”, **J. Math. Anal. Appl.** **160** (1991),no.2, pp. 342-357 {see also **16**}
3. **D. Karayannakis**, “Logarithms of Isometries and their spectral decompositions in Hardy spaces”, **Annali di Matematica pura ed applicata**, Serie IV, Tome CLXV, 1993
4. **D. Karayannakis**, “On the nodal values of the Franklin analyzing wavelet”, **Wavelet Anal.Appl.**, .5, 1994, pp. 449-458. [see also **17**]
5. **jointly with D. Sotiropoulos**, “An explicit form for Love wave velocity”, **Int.J.Engin.Sci.****32**(1994), no.2, pp. 339-345.
6. **jointlty with M.S. Lambrou and M. Magiropoulos**, “Spectral decompositions of isometries on $cp, 1 < p < \infty$ ”, **J. Math. Anal. Appl.** **215** (1997), no.1, pp.190-211.

7. **D. Karayannakis**, “*Fractional powers of generalized involutions on Banach spaces*”, **Int. J. Math. Game Theory & Algebra**, **9** (1999), no.3, pp. 179-186.
8. **jointly with M. Magiropoulos**, “*A “double” Cauchy-Schwarz type inequality*”, **Missouri J. Math. Sci.** **12** (2000), no.1, pp.26-30
9. **D. Karayannakis**, “*Localization of the Franklin wavelets on the line*”, **Int. J. Math. Game Theory & Algebra**, **10** (2000), no.4, pp. 265-274
10. **jointly with I.S. Xezonakis and P. Chatzidiakos**, “*Analytic solution of the phase difference equation in concrete communication loop systems*”, **Int. J. Math. Game Theory & Algebra** **12** (2002), no.3, pp.185-190
11. **D. Karayannakis**, “*Fractional powers of generalized involutions on Banach spaces.II*”, **Int. J. Math. Game Theory & Algebra**, **3** (2004)
12. **jointly with M. Magiropoulos**, “*Norm estimates in Hardy spaces by use of the Gamma function*”, **Journal of Interdisciplinary Mathematics**, **8** (2005), no.1,
13. **jointly with H. Alzer and H. Srivastava**, “*Series representations for some mathematical constants*”, **J. Math. Anal. Appl.** **320** (2006), pp.145-162
14. **D. Karayannakis** and **I.S. Xezonakis**, “*An algorithm for the evaluation of the Gamma function and ramifications. Part I*”, **Int. J. Math. Game Theory, & Algebra**, **V.18**, Issue 6
15. **D. Karayannakis**, “*A Volume Product Representation and Its Ramifications in $l_{p,n}$, $1 < p < \infty$* ”, **APM**, **V.1**, No 5, September 2011,
16. **5th Conference on Complex Analysis (Abstracts)**, Halle, Germany, (former DDR), 2-17 December 1988.
17. **Proceedings International Conference on Wavelets**, Taormina, Italy, 14-20 October 1993
18. **D. Karayannakis**, “*Gautchi’s ratio and the Volume of the Unit Ball in R^n* ”, **Journal of Mathematics**, **5** (2008), p.395-413.
19. **Proceedings 5th Europ Congr. Of Mathematics**, Amsterdam, Netherland, 18-22 July 2009
20. **D. Karayannakis & M.Lambrou**, “*On a conjectured Inequality in Convex Analysis for the case of the Unit Ball of l_p^n , $1 \leq p \leq \infty$* ”, **Journal of Inequal. & Special Functions**, 2012
21. **D. Karayannakis, D. Kladis & J. Serafimides**, “*Rational Frieze Sequences associated to a 2×2 generalized Kronecker Quiver*” **IJ MCR**, February 2014
22. **D. Karayannakis & A. Stamoulias**, “*A New Proximity Definition for 2-D and 3-D Curves*” **EML** April 2015
23. **D. Karayannakis and C.J.Aivalis** “*Reciprocal Vieta-type formulas and some applications*” **Intern.J. of Discrete Math.& Cryptography**, 2018, **V. 21**, Issue 1.
24. **D. Karayannakis** and **M-E,Xezonaki**, “*Rigidity and Shrinkability of Diagonalizable Matrices*”, **British Journal of Mathematics and Computer Science**, **V.21**, issue 6, April 2017

Other Published Work/ Publishing

1. Assist.Editor / Translator for the Math. Series of Crete University Press (1990-2001)
(See letter of reference from CUP former Director & emeritus President **S.Trachanas**)

Titles:

- a) With **M.S. Lambrou**: **G.H.Hardy**, “**The apology of a mathematician**”, 1990
- b) With **A. Giannopoulos**: **Michael Spivak**, “**Calculus**”, 1991
- c) With **A. Giannopoulos**: **J. Marsden & A. Tromba**, “**Vector Calculus**”, 1992
- d) With **N. Stamatakis**: **E. T. Bell**, “**The Mathematicians**” **Part II**, 1993

- e) **R. Churchill & J. Brown** “Complex Variables and Applications”, 1994
 - f) With P. Pamfilos: **Gilbert Strang**, “Linear Algebra and its Applications”, 1996
 - g) With M. Magiropoulos: **Donald Davies**, “The Nature and Power of Mathematics”, 2001
2. **D. Karayannakis**, “*Small-particles classification*”, (in Greek), Mathimatiki Epitheorisi (Hellenic Mathematical Society), 1977
 3. **D. Karayannakis**, “*Chord theorems in the plane*”, (in Greek), Thaletus (J.TEI of Crete, 1988)
 4. **D. Karayannakis**, “*The miraculous world of derivatives*, (in Greek), Thaletus (J.TEI of Crete, 1989)
 5. **D. Karayannakis & C.J. Aivalis**, “*On the equation $x^x = \alpha$* ”, academia.edu , August 2015
 6. **D. Karayannakis**, “*On the equation $z^z = w$ in the cut-plane*”, academia.edu , November 2015
 7. **D. Karayannakis**, “*Extreme values of incentre related ratios in a triangle*”, academia.edu , April 2017

Number of citations (Not self references included!)
73 (April 2018)

Textbooks* (in Greek & Monograph (in English) authored by D. Karayannakis

1. **Signal Analysis. Theory and Applications**, Ziti Press, October 2011, ISBN 978-960-456-300-5
2. **Introductory Linear Algebra**(Theory and Applications), Ziti Press, Octob. 2012, ISBN 978-960-456-340-1
3. **Discrete and Continuous Mathematical Methods**, (with emphasis on Informatics Applications), Disigma Press, October 2014, ISBN 978-960-9495-47-9
4. **Numerical Linear Algebra**, Disigma Press, March 2015, ISBN 978-960-9495-46-2
5. **Old and New Gamma & Psi Functions Algorithms and their Ramifications** (Monograph) October 2017, Lambert Academic Publishing, ISBN 978-3-330-34737-3

Note.

*All four textbooks are Greek State & TEI of Crete approved as the official textbooks for the courses of Appl. Math (undergraduate and graduate) DSP Theory & Lab and Linear Algebra, for the formerly Department of Applied Informatics and Multimedia and currently Department of Informatics Engineering

Citations within international textbooks and monographs

1. Charles Chui, Laura Montefusco and Luigia Puccio, *Wavelets: Theory, Algorithms, Applications*”, Academic Press (1994) p.xv
2. Danuta Przeworska-Rolewicz *Logarithms and Antilogarithms*, Kluwer Academic Press (1998)
p. 327, 341
3. Jonathan S. Golan, *The Linear Algebra a Beginning Grad. Student Ought to Know*, Kluwer Academic Press (2004) p. 289
4. J. Michael Steele, *The Cauchy Swartz Master Class, An Introduction to the Art of Mathematical Inequalities*, Cambridge Univ. Press (2004), p.286, 297, 304
5. R.J. Fleming, J.E. Jamison, A. Jeffrey, H. Brezis and R. Douglas *Isometries in Banach Spaces*, Chapman and Hall (2007), p. 220, 232

Administrative Positions (1999-2017)

1. **Chairperson**, Sector of Math & Appl.Math, , Dept of Science (TEI of Crete)
2. **Director of Undergr. Math Studies**, Dept.of Appl.Inf.& Multim. (TEI of Crete)
3. **Associate Head** of Telemedicine Studies Programme (1999-2006)
4. **Co-Director** of Programming Algorithms Development Laboratory (**PAD**)
5. **Former President** of Academic Personnel Union of TEI of Crete
6. Currently **Director** of the newly established (October 2015) **interdepartmental Lab of Applied and Computational Mathematics**.

Teaching Experience (HE Level)

1. **Teaching & Research Assistant**, UIUC,USA, Spring Semester 1980-Spring Sem. 1983,and Fall Sem.1984-Summer Sem.1986
Courses (Theory sect. and/or Exerc.sect.): Calculus I &II, Introductory Real Analysis, Introductory Complex Analysis
2. **Visiting Instructor**, UIUC, **Dept.of Math**. Fall Semester 1986_
Course (Theory and supervision Exerc.ises Sect.ion): Ordinary Differential Equations
3. **Visit. Assist.Prof.,Univ,of Crete,Greece, Dept.of Math.**,Febr.1987-Jan.1990_
, General Topology, History of Mathematics
4. **Visit. Assist.Prof.,Tecnological Univ.of Crete at Chania,Greece,Febr.1990-Jan.1991,**
Department of Mines and Minerals, Course: Calculus II & ODEs
5. **Visit. Assist.Prof. Univ,of Crete, Greece, Dept.of Physics**, Febr.1991-August 1994
Courses: Calculus I &II, Ordinay Differential Equations, History of Mathematics
6. **Associate.Professor,TEI of Crete, Dept.of Sciences**, Sept.1994-Sept.1996
Courses: Calculus I &II,Discrete Mathematics,Prob.Theory, Differ.Equations
7. **Ten.Assoc.Professor,TEI of Crete,Greece,Dept.of Science**,Sept.1996--September 2002
Courses: Calculus II, Linear Algebra, Applied Math.,Topics in Fourier Analysis
8. **Visiting Associate Professor.GIT, Atlanta, School of Math.**, (Sabbatical leave)
Spring Semester 1999-2000 Course : O.DE.s & Boundary Value Problems
9. **Professor,TEI of Crete (jointly Dept.of Science and Dept. Comp.Sc.)**, Sept.2002-today
Courses: Calculus I, ,Linear Algebra, Applied Math., Topics in Fourier Analysis
Note: *effective July 2013 tenured full professor ,Dept.of Informatics Engineering*
10. **Currently at Dept.of Inform.Engineer., Director Undergraduate Math & Applied Math Program and M.Sc. Math Program in CS**
- 11.. **Supervisor of 16 Bachelo of Science Theses** (7 Dept.Electr.Eng.,4 Dept Comp.Sc.,2 Telemedicine Program of Studies, 2 Dept.of Applied Inf.& Multim., 1 Dept. Inf. Engin.)

OTHER INTERNATIONAL TEACHING MOBILITY (2000-2009)

1. University of LaRochelle (2000, Erasmus, invited seminars speaker)
2. Brno, Polytechnic School (2005, Erasmus, invited seminars speaker)
3. University of LaRochelle (2009, Erasmus, invited seminars speaker)

CHARACTER LETTERS OF REFERENCE

- 1 **Professor George Tsebelis, Anatol Rapoport Collegiate Professor, Political Science, University of Michigan, e-mail tsebelis@umich.edu**
2. **Dr. Iro Mylonakou - Keke , Professor of Social Pedagogy**
Director, Master Degree Programmes in "Social Neurosciences, Social Pedagogy and Education" & "Higher EducationManagement"
National & Kapodistrian University of Athens,Dept. of Primary Education
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