CURRICULUM VITAE
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First Name : Georgios

Last Name : Zouraris

Date and place of birth : 22 Sept 1966, Thessaloniki, Greece.

Citizenship and Nationality : Greek.

Mailing address : Department of Mathematics, University of Crete, GR–714 09 Heraklion, Crete, Greece.
Phone :+30-281-0393865 (office)
Fax :+30-281-0393881, +30-281-0393861

e–mail address : zouraris@math.uoc.gr

Education :
1995 : Ph.D., Mathematics Department, University of Crete, Heraklion, Crete, Greece.
1990 : M.Sc., Mathematics Department, University of Crete, Heraklion, Greece.
1988 : Undergraduate degree in Mathematics, Mathematics Department, University of Crete, Heraklion, Greece.

Scholarships :
1984–1988 : Award of the Institute of State Scholarships (I.K.Y.).
1989–1994 : Graduate Fellow (E.M.Y.), Mathematics Department, University of Crete, Heraklion, Greece.

Predoctoral Academic Employment :
1988–1994 : Teaching Assistant at Mathematics Department, University of Crete, Heraklion, Greece.
1986–1994 : Research Assistant at Institute of Applied and Computational Mathematics (IACM), Foundation for Research and Technology–Hellas (FORTH), P.O. Box 1527, GR–711 10 Heraklion, Greece.

Postdoctoral Academic Employment:
March '04 – present : Assistant Professor, Department of Mathematics, University of Crete, Heraklion, Crete, Greece.
July '01 – February '04 : Assistant Professor, Department of Mathematics, University of the Aegean, GR–832 00 Karlovassi, Samos, Greece.
Sep '00 – June '01 : Post–Doc Researcher (EU TMR–Network: Viscosity Solutions and their Applications), Centre De Recherche en Mathématiques de la Décision (CEREMADE), UMR CNRS 7534, Université de Paris IX-Dauphine, Place du Maréchal de Lattre-de-Tassigny, F-757 75 Paris Cedex 16, France.
Sep '97 – Aug '00 : Post–Doc Researcher (EU TMR–Network: Hyperbolic Systems of Conservation Laws), Department of Numerical Analysis and Computing Science (NADA), Royal Institute of Technology (KTH), S–100 44 Stockholm, Sweden.
Sep '96 – Aug '97 : Visiting Assistant Professor, Department of Mathematics, University of Crete, Heraklion, Greece.
Mar '96 – Aug '96 : Visiting Lecturer, Department of Mathematics, University of Crete, Heraklion, Greece.
Sep '95 – Dec '95 : Research Fellow (EC HCM–Network '*Reaction Diffusion Equations*'), Departamento de Matemática Aplicada, Universidad Complutense de Madrid, E–280 40 Madrid, Spain.
Jun '95 – Aug '95 : Research Fellow, IACM, FORTH, Heraklion, Greece.

Short Term Visits:
– School of Computational Science and Information Technology, 400 Dirac Science Library, Florida State University, Tallahassee, FL 32306–4120, USA (March 2006).
– Institute for Computational and Engineering Sciences (ICES), ACES, The University of Texas at Austin, Austin, TX 78759, USA (November 2000, July 2002, January 2003, August 2004). (Before Spring 2003 ICES called 'Texas Institute for Computational and Applied Mathematics' (TICAM)).
– NADA, KTH, Sweden (whithin the European Networks: 'Viscosity Solutions and their Applications' and 'Hyperbolic and Kinetic Equations: Asymptotics, Numerics, Analysis').
– School of Computer Science and Communication, KTH, Sweden: Gästforskare (1/9/2007 - 31/5/2008).

Participation in research projects:
– Integrated Mediterranean Program on Informatics–EEC: '*Creation of a scientific algorithms library*', (1988–1990, IACM, FORTH, Heraklion, Greece).
– Program for the Establishment of Research Cooperations–Greek General Secretariat for Research and Technology : '*Mathematical methods for wave propagation problems in the sea environment; direct and inverse problem*', (1990–1995, IACM, FORTH, Heraklion, Greece).
– MA.S.T. II–EC: '*Ocean Acoustic Propagation Modelling*' (PRO.MODE) (1995, IACM, FORTH, Heraklion, Greece).
– PE.N.E.D #1747–Greek General Secretariat for Research and Technology: '*Numerical methods for evolution partial differential equation*' (1996–1998, University of Crete, Heraklion, Greece).
– Swedish National Network in Applied Mathematics (NTM): '*Numerical approximation of stochastic differential equations*' (1998-2000, NADA, KTH).
– Greek General Secretariat for Research and Technology–Program for the Scientific and Technological Cooperation between Greece and France: 'Sound wave propagation in 3D sea environment using the Parabolic Approximation' (2003-2005, University of Athens, Athens, Greece).
– Program PITHAGORAS/EPEAEK-II: 'Theoretical study and numerical approximation of evolution and steady-state partial differential equations arising as mathematical models in physics and industrial applications' (2004-2006, University of the Aegean, Karlovassi, Greece) funded by the Greek Ministry of Education.
– The Research Committee of The University of Crete # 2299: 'Analysis of numerical methods for the approximation of the solution of stochastic and non-stochastic partial differential equations of parabolic type' funding by The Research Account of the University of Crete (2006-2007, University of Crete).
– Greek General Secretariat for Research and Technology–Program for the Scientific and Technological Cooperation between Greece and France: 'Analysis and numerical methods for linear and nonlinear wave problems' (2007-2008, University of Athens, Athens, Greece).
– The Research Committee of The University of Crete #3375/15.4.08: 'Numerical methods for stochastic differential equations' funding by The Research Account of the University of Crete (2008-2010, University of Crete).

Research Field:
Numerical analysis (numerical methods for differential equations).

Scientific works:
`I. In International Refereed Journals.`
I1. G. D. Akrivis, V. A. Dougalis and G. E. Zouraris, *Error estimates for finite difference methods for a wide–angle 'parabolic' equation*, SIAM Journal on Numerical Analysis 33 (1996), pp. 2488–2509.
I2. G. E. Zouraris, *Convergence of Runge–Kutta approximations for parabolic problems with Neumann boundary conditions*, Numerische Mathematik 77 (1997), pp. 123–142.

I3. G. E. Zouraris, *On the convergence of a linear conservative two–step finite element method for the nonlinear Schrödinger equation*, Mathematical Modelling and Numerical Analysis 35 (2001), pp. 389–405.
I4. G. D. Akrivis, V. A. Dougalis and G. E. Zouraris, *Finite difference schemes for the 'parabolic' equation in a variable depth environment with a rigid bottom boundary condition*, SIAM J. Num. Anal. 39 (2001), pp. 539–565.
I5. A. Szepessy, R. Tempone and G. E. Zouraris, *Adaptive weak approximation of stochastic differential equations*, Communications on Pure and Applied Mathematics 54 (2001), pp. 1169–1214.

I6. K.-S. Moon, A. Szepessy, R. Tempone and G. E. Zouraris, *Convergence rates for adaptive approximation of ordinary differential equations*, Numerische Mathematik 96 (2003), pp. 99–129.
I7. K.-S. Moon, A. Szepessy, R. Tempone and G. E. Zouraris, *A variational principle for adaptive approximations of ordinary differential equations*, Numerische Mathematik 96 (2003), pp. 131–152.

I8. I. Babuska, R. Tempone and G. E. Zouraris, *Galerkin finite element approximations of stochastic elliptic partial differential equations*, SIAM Journal on Numerical Analysis 42 (2004), pp. 800–825.

I9. M. Plexousakis and G. E. Zouraris, *On the construction and analysis of high order locally conservative finite volume-type methods for one dimensional elliptic problems*, SIAM Journal on Numerical Analysis 42 (2004), pp. 1226–1260.

I10. I. Babuska, R. Tempone and G. E. Zouraris, *Solving elliptic boundary value problems with uncertain coefficients by the finite element method: the stochastic formulation*, Computer Methods in Applied Mechanics and Engineering 194 (2005), pp. 1251–1294.

I11. K.-S. Moon, A. Szepessy, R. Tempone and G. E. Zouraris, *Convergence rates for adaptive weak approximation of stochastic differential equations*, Stochastic Analysis and Applications 23 (2005), pp. 511-558.

I12. C. V. Nikolopoulos and G. E. Zouraris, *Numerical solution of a non-local elliptic problem modeling a thermistor with a finite element and a finite volume method*, Discrete and Continuous Dynamical Systems-Supplements (2007), vol. 2007, Special Issue, pp. 768-778.

I13. E. Mordecki, A. Szepessy, R. Tempone and G. E. Zouraris, *Adaptive weak approximation of diffusions with jumps*, SIAM Journal on Numerical Analysis 46 (2008), pp. 1732-1768.

I14. P. Xanthopoulos and G. E. Zouraris, *A linearly implicit finite difference method for a Klein-Gordon-Schrödinger system modeling electron-ion plasma waves*, Discrete and Continuous Dynamical Systems-Series B 10 (2008), pp. 239-263.

I15. V.A. Dougalis, F. Sturm and G. E. Zouraris, *On an initial-boundary value problem for a wide-angle parabolic equation in a waveguide with a variable bottom*, Mathematical Methods in the Applied Sciences (published online on 20th November 2008).

II. In Proceedings of Refereed Conferences.

II1. G. E. Zouraris, *On the convergence of the Gauss–Legendre Runge–Kutta time–discrete approximations of a Neumann parabolic problem*, Proceedings of 5th National Congress on Mechanics (27−30 August 1998, Ioannina), edited by P.S. Theocaris, D.I. Fotiadis, C.V. Massalas, University of Ioannina Press: vol. 2, pp. 1023–1030, 1998.

II2. V. A. Dougalis, F. Sturm, G. E. Zouraris, *Boundary conditions for the wide angle PE at a sloping bottom*, Proceedings of the 8th European Conference on Underwater Acoustics (12−15 June 2006, Carvoeiro, Portugal), edited by S.M. Jesus and O.C. Rodriguez (ISBN 989-95068-0-X), vol. 1, pp. 51–56.

II3. G. E. Zouraris, *A linearly implicit finite element method for a Klein-Gordon-Schrodinger-type system*, Proceedings of the 8th Hellenic European Research on Computer Mathematics and its Applications Conference (20–22 September 2007), Athens University of Economics and Business, Athens, Greece. (http://www.aueb.gr/pympe/hercma/proceedings2007/H07-FULL-PAPERS-1/ZOURARIS-1.pdf).

II4. C. V. Nikolopoulos and G. E. Zouraris, *'Numerical solution of a non-local elliptic problem modeling a thermistor with a finite element and a finite volume method'* in the book 'Progress in Industrial Mathematics at ECMI 2006', Mathematics in Industry vol. 12, ISBN 978-3-540-71991-5, Luis L. Bonilla Miguel Moscoco, Gloria Platero and Jose M. Vega (editors), pp. 827–832, Springer-Verlag, 2008.

II5. D. C. Antonopoulou, V. A. Dougalis and G. E. Zouraris, *A finite element method for the 'Parabolic' Equation in a range-dependent environment with a rigid bottom* in the book 'Theoretical and Computational Acoustics 2007', Proceedings of the 8$^{\text{th}}$ International Conference on Theoretical and Computational Acoustics (2−7 July 2007, Heraklion, Crete, Greece), edited by M. Taroudakis and P. Papadakis (ISBN 978-960-89758-4-2), pp.191-195, 2008.

III. Articles in Books.

III1. K.-S. Moon, A. Szepessy, R. Tempone and G. E. Zouraris, *Hyperbolic Differential Equations and Adaptive Numerics*, in the book 'Theory and Numerics of Differential Equations', J. F. Blowey, J. P. Coleman and A. W. Craig (editors), pp. 231–280, Springer-Verlag, 2001.

III2. V.A. Dougalis, N.A. Kampanis, F. Sturm, and G.E. Zouraris, *Numerical Solution of the Parabolic Equation in Range-Dependent Waveguides*, in the book 'Effective Computational Methods for Wave Propagation' (ISBN 978-1584885689), N.A. Kampanis, V.A. Dougalis and J.A. Ekaterinaris (editors), Chapman & Hall/CRC Press, 2008.

Conferences (5 last years):

C1. *Dahlquist Fellowship Workshop 2008: 'Stochastic Differential Equations: Models and Numerics',* (20–22 October 2008), KTH, Stockholm, Sweden. (invited speaker).

C2. *4th Workshop on Numerical Methods for Evolution Equations*, (26–27 September 2008), University of Crete and IACM-FORTH, Heraklion, Crete, Greece. (invited speaker).

C3. *Efficiency in and modeling with computational stochastic partial differential equations: sparse grids, multi-level and adaptive methods,* (3-5 April 2008), Hausdorff Research Institute for Mathematics (HIM), Universität Bonn, Bonn, Germany. (invited speaker).

C4. *The 8th Hellenic European Research on Computer Mathematics and its Applications Conference,* (20-22 September 2007), Athens University of Economics and Business, Athens, Greece. (speaker).

C5. *Workshop on Mathematical and Computational Methods for Accelerated Molecular, Stochastic and Hybrid Simulation,* (25-27 June 2007), Department of Applied Mathematics of the University of Crete and IACM-FORTH, Heraklion, Crete, Greece. (invited speaker).

C6. *Multiscale Analysis and Computations in Stochastic Differential Equation Modelling 2007 (macs-diem 2007),* (22-24 February 2007), University of Sussex, Brighton, UK. (invited speaker).

C7. *Numerics and Theory for Stochastic Evolution Equations,* (22-24 November 2006), Fakultät für Mathematik, Universität Bielefeld, Bielefeld, Germany. (speaker).

C8. *Third Workshop on Numerical Methods for Evolution Equations,* (22–23 September 2006), University of Crete and IACM-FORTH, Heraklion, Crete, Greece. (invited speaker).

C9. *Numerics for Stochastic Differential Equations with Applications,* (26 February - 2 March 2006), School of Computational Sciences, Florida State University, Tallahassee, Florida, USA. (invited speaker).

C10. *Computational Stochastic Differential Equations,* (18–24 September 2005), Mathematical Research and Conference Center (MRCC) of the Institute of Mathematics of the Polish Academy of Sciences (IMPAN), Bedlewo, Polland. (invited speaker).

C11. *Second Workshop on Numerical Methods for Evolution Equations,* (24–25 September 2004), University of Crete and IACM-FORTH, Heraklion, Crete, Greece. (invited speaker).

I was member of the Organizing Committee of the following workshops:
– Mathematical Modeling in Sciences and Modern Technologies: evolution and perspectives, 6-8 June 2002, Department of Mathematics, University of the Aegean, Karlovassi, Samos, Greece.
– Mathematical Modeling in the Physical Sciences and Modern Technologies: evolution and perspectives - II, 7 June 2003, Department of Mathematics, University of the Aegean, Karlovassi, Samos, Greece.

Invited talks (5 last years):
– 10 May 2007, NADA, KTH, Stockholm, Sweden.
– 9 March 2006, School of Computational Sciences, Florida State University, Tallahassee, FL, USA.
– 13 April 2005, Department of Mathematics and Statistics, University of Cyprus, Nicosia, Cyprus.
– 2 November 2004, Department of Computational Mathematics/Chalmers Finite Element Center, Chalmers University of Technology (CTH), Göteborg, Sweden.
– 13 June 2004, Department of Mathematics, University of the Aegean, Karlovassi, Samos, Greece.

Teaching Experience:
At the Department of Mathematics of the University of Crete:
Numerical methods for differential equations (Spring 1996), Analytic geometry and complex numbers (Fall 1996), Approximation theory and applications (Spring 1997), Functional Analysis (Spring 2004, Spring 2005), Stochastic Processes (Spring 2004), Finite Difference Methods for Partial Differential Equations (Fall 2004), Tutorials (Fall 2004, Spring 2004, Fall 2005, Spring 2006, Fall 2006, Fall 2008), Introduction to Numerical Analysis (Spring 2006), Partial Differential Equations (Spring 2006), Numerical Analysis (graduate) (Fall 2005, Fall 2006, Fall 2008), Laboratory of Analysis (Spring 2007), Mathematical Models of Classical Physics (Spring 2007).
At the Department of Chemistry of the University of Crete:
Mathematics I (Fall 2004).
At the Department of Mathematics of the University of the Aegean:
Dynamical Programming (Fall 2001, Fall 2002), Mathematical Modeling (Fall 2001), Introduction to Numerical Analysis (Spring 2002, Spring 2003), Scientific Computing (Fall 2003), Numerical Analysis (graduate) (Spring 2002, Fall 2002, Fall 2003).
At the School of Computer Science and Communication of KTH the graduate course:
FDN3214 Finite Element Methods (Spring 2008).

Academic supervising experience:
I have supervised the following theses:
– Chrysanthi Maggina, 'Least squares methods', Undergraduate Degree Thesis (October 2003), Department of Mathematics, University of the Aegean (in Greek).
– Nikolaos Rokopanos, 'Discontinuous Galerkin methods for ODE systems', Master Thesis (June 2005), Department of Mathematics, University of the Aegean (in Greek).
– Alexandra Geronti, 'Nonlinear Schrödinger Equation: Modeling and Numerical Approximations', Master Thesis (April 2007), Department of Mathematics, University of the Aegean (in Greek).
Also, I was assistant supervisor of the following doctoral thesis:
– Dimitra Antonopoulou, 'Theory and Numerical Analysis of Parabolic Approximations', Ph.Thesis (April 2006), Department of Mathematics, National and Kapodistrian University of Athens (in Greek).

Administrative Experience:
Member of the Steering Committee of the Program of Graduate Studies of the Department of Mathematics of the University of the Aegean (January 2002–February 2004).

Academic Service:

I have refereed manuscripts for the journals: Computer Methods in Applied Mechanics and Engineering, Mathematical Modeling and Numerical Analysis, Acustica, Chemical Engineering Science, and SIAM Journal on Scientific Computing.