

# Sifalakis G. Anastasis (Curriculum Vitae)

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CONTACT INFORMATION	Applied Mathematics and Computers Laboratory Dep. of Production Engineering and Management Technical University of Crete Office 145.B.099 Kounoupidiana, Chania 73100 Greece	<i>Tel.</i> : +30 2821037741 <i>Fax</i> : +30 2821037842 <i>E-mail</i> : <a href="mailto:sifalak@gmail.com">sifalak@gmail.com</a>
PERSONAL INFORMATION	Home Address: Kirtomados, Chania, GR 73005 Home Tel.: +30 2821077841 Date of Birth: November 24 1976 Citizenship: Hellenic Military obligations: Completed Marital Status: single	
RESEARCH INTERESTS	Numerical Analysis Numerical Solution of PDEs Iterative Methods Fokas Transform Method Scientific Computing	
EDUCATION	<b>Ph.D.</b> , "Applied Sciences and Technology" with a specialization in "Applied and Computational Mathematics." Technical University of Crete, December 2007. Thesis Topic: <i>Iterative Approximations and Parallel Grid/Cluster Computations for the Novel Solution of Elliptic Partial Differential Equations.</i> <a href="#">pdf (in Greek)</a>	
	<b>M.S.</b> , "Applied Sciences and Technology" with a specialization in "Applied and Computational Mathematics." Technical University of Crete, December 2002. Thesis Topic: <i>Iterative methods for the solution of linear equations arising from finite elements.</i>	
	<b>B.S.</b> , "Mathematics" University of Crete September 1999	
JOURNAL PUBLICATIONS	<ol style="list-style-type: none"><li>1. M. Asvestas, <b>A.G. Sifalakis</b>, E.P. Papadopoulou and Y.G. Saridakis, <i>Fokas method for a multi-domain linear reaction-diffusion equation with discontinuous diffusivity</i>, Journal of Physics: Conference Series, 490 012143 <a href="https://doi.org/10.1088/1742-6596/490/1/012143">doi:10.1088/1742-6596/490/1/012143</a></li><li>2. Y.G. Saridakis, <b>A.G. Sifalakis</b> and E.P. Papadopoulou, <i>Efficient Numerical Solution of the Generalized Dirichlet-Neumann Map for Linear Elliptic PDEs in Regular Polygon Domains</i>, Journal of Computational &amp; Applied Mathematics, 236 (9), pp 25152528 , 2012, <a href="https://doi.org/10.1016/j.cam.2011.12.011">doi:10.1016/j.cam.2011.12.011</a></li><li>3. <b>A.G. Sifalakis</b>, S.R. Fulton, E.P. Papadopoulou and Y.G. Saridakis <i>Direct and Iterative Solution of the Generalized Dirichlet-Neumann Map for Linear Elliptic PDEs on Square Domains</i>, Journal of Computational &amp; Applied Mathematics, 227, pp 171-184, 2009 <a href="https://doi.org/10.1016/j.cam.2008.07.025">doi:10.1016/j.cam.2008.07.025</a></li><li>4. <b>A.G. Sifalakis</b>, A.S. Fokas, S.R. Fulton, and Y.G. Saridakis, <i>The Generalized Dirichlet-Neumann Map for Linear Elliptic PDEs and its Numerical Implementation</i>, Journal of Computational &amp; Applied Mathematics, 219 (1), pp 9-34, 2008 <a href="https://doi.org/10.1016/j.cam.2007.07.012">doi:10.1016/j.cam.2007.07.012</a></li></ol>	

5. **A.G. Sifalakis**, E.P. Papadopoulou and Y.G. Saridakis, *Numerical Study of Iterative Methods for the Solution of the Dirichlet-Neumann Map for Elliptic PDEs on Regular Polygon Domains*, International Journal of Applied Mathematics and Computer Sciences, 4 (3), pp 173-178, 2007 [pdf](#)

PAPERS IN  
PREPARATION

1. D. Mantzavinos, M.G. Papadomanolaki , Y.G. Saridakis and **A.G. Sifalakis**, **A.G. Sifalakis**, *A novel transform approach for a brain tumor invasion model with heterogeneous diffusion in 1+1 dimensions*, submitted

CONFERENCE  
PROCEEDINGS

1. **A.G. Sifalakis**, S.R. Fulton, E.P. Papadopoulou and Y.G. Saridakis *On the Iterative Analysis of the Dirichlet-Neumann Map for Linear Elliptic PDEs*, Proceedings NUMAN07, pp 130-134 , Kalamata 2007

CONFERENCES  
(PRESENTATION)

1. *Fifth Conference in Numerical Analysis (NumAn 2012) Recent Approaches to Numerical Analysis: Theory Methods and Applications*, Chania, Greece 2012
2. *Conference in Numerical Analysis (NumAn 2010) Recent Approaches to Numerical Analysis: Theory Methods and Applications*, Chania, Greece 2010
3. *The 9th Hellenic European Research on Computer Mathematics & its Applications Conference (HERCMA 2009)*, Athens, Greece 2009
4. *The 8th World Congress on Computational Mechanics (WCCM8) and 5th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2008)*, Venice, Italy 2008
5. *The 8th Hellenic European Research on Computer Mathematics & its Applications Conference (HERCMA 2007)*, Athens, Greece 2007
6. *Fourth International Conference on Modeling and Simulation*, Prague, Czech Republic 2007
7. *Conference in Numerical Analysis (NumAn 2007) Recent Approaches to Numerical Analysis: Theory Methods and Applications*, Kalamata, Greece 2007
8. *International Conference on Modern Mathematical Methods in Science and Technology*, Paros, Greece 2006
9. *International Conference on Nonlinear Waves, Integrable Systems and Their Applications*, Colorado Springs, USA, 2005

SEMINARS -  
CONFERENCES  
ATTENDANCE

1. *Data Mining with Emphasis on Medical Applications*, Chania, Greece 2004
2. *Mathematics Summer School 2003*, Herakleion, Greece 2003
3. *The 9th Greek National Conference of Mathematical Analysis*, Chania, Greece 2002

PROFESSIONAL  
EXPERIENCE

2014-now: Laboratory Teaching Staff at the Applied Mathematics and Computers Laboratory (AMCL) of the Department of Sciences of the Technical University of Crete. Supported courses: *Numerical Analysis*, *Numerical Linear Algebra*, *Numerical Methods in Environmental Engineering*

2002-2013: Laboratory Assistant / IDAX at the Applied Mathematics and Computers Laboratory (AMCL) of the Department of Sciences of the Technical University of Crete. Supported courses: *Introduction to Computer Programming*, *Discrete Mathematics*, *Numerical Analysis*, *Linear Algebra*, *Numerical Linear Algebra*

2000-2001: Researcher at *PENED 99ED566 - High performance computations for scientific applications and multimedia applications*.

GRANTS	2003-2005: <i>EPEAEK II Irakleitos - Research Scholarships</i> concerning PHD preparation.
SOFTWARE SKILLS	Math/Programming: <ul style="list-style-type: none"><li>• Matlab, Fortran, C, Mathematica, L<sup>A</sup>T<sub>E</sub>X</li></ul> Operating Systems: <ul style="list-style-type: none"><li>• Linux, Unix, Microsoft Windows</li></ul>
LANGUAGES	Greek (native language) English ( <i>First Certificate in English</i> - University of Cambridge)
OTHER	2000-2002 Postgraduate students representative to the general assembly of the department of sciences at Technical University of Crete