

SYMEON PAPADIMITROPOULOS

University of Crete, Greece
Department of Mathematics & Applied Mathematics
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EDUCATION

- **Ph.D.:** Dept. of Mathematics and Applied Mathematics, University of Crete, Greece, May 2015 - Present, under the supervision of Prof. Chrysoula Tsogka and Prof. Dimitrios Mitsoudis
- **M.Sc.:** Mathematical Modeling and Computational Techniques, Dept. of Mathematics, University of Crete, Greece, October 2012 - April 2015,
M.Sc. Thesis: *Partial array imaging of extended reflectors in two-dimensional waveguides*
- **B.Sc.:** Computational Mathematics and Software Development, Dept. of Applied Mathematics, University of Crete, Greece, September 2005 - November 2012,
B.Sc. Thesis: *Imaging of extended reflectors in two-dimensional waveguides.*

RESEARCH INTERESTS

- Numerical methods for PDEs
- Wave propagation and applications to imaging
- Underwater acoustics
- Inverse problems

ACADEMIC & RESEARCH EXPERIENCE

TEACHING ASSISTANSHIPS (in University of Crete)

- Programming II (Python), Spring 2017
- Numerical Linear Algebra, Fall 2016
- Numerical Solution of PDEs, Fall 2015
- Numerical Solution of ODEs, Spring 2015
- Numerical Solution of ODEs, Spring 2014
- Introduction to Programming (Python), Fall 2013
- Numerical Solution of ODEs, Spring 2013
- Numerical Analysis, Fall 2012

- Introduction to Programming (C), Spring 2012
- Numerical Analysis, Fall 2011
- Numerical Solution of ODEs, Spring 2011
- Numerical Analysis, Fall 2010
- MatLab for Calculus II, Spring 2010

COURSE PROJECTS

Numerical Solution of Partial Differential Equations: *Finite Elements Method for the Laplace Equation*

Mathematical Modeling: *N interacting vortices*

Game Theory: *Highest and Lowest Unique Bid Auctions*

Introduction to Monte Carlo Methods: *Monte Carlo methods for imaging*

Scientific Computing: *Strang splitting for the Gross-Pitaevskii equation*

SUMMER SCHOOLS

- Franco-German Summer School on *Inverse Problems and Imaging*, September 18 - 22, 2017, Bremen, Germany
- DENORMS Action Training School on *Sound waves in metamaterials and porous media*, September 26 - 30 2016, Prague, Czech Republic
- Franco-German Summer School on *Inverse Problems for waves*, August 24 - 28, 2015, Paris, France
- MathMods Summer School on *Mathematical Models for Social Innovation - Modelling Earthquakes*, June 23 - July 4 2014, L'aquila, Italy
- Franco-German Summer School on *Inverse Problems and PDEs*, October 7 - 11, 2013, Bremen, Germany
- MathMods Intensive Programme in *Mathematical Models in Seismology*, July 8 - 19 2013, L'Aquila, Italy

INTERNSHIP

Intern at Foundation for Research and Technology - Hellas (FO.R.T.H.), July - September 2011

PUBLICATIONS

JOURNAL PUBLICATIONS

- Chrysoula Tsogka, Dimitrios A. Mitsoudis and **Symeon Papadimitropoulos**, *Imaging extended reflectors in a terminating waveguide*, SIAM J. Imaging Sci., *Submitted*
- Chrysoula Tsogka, Dimitrios A. Mitsoudis and **Symeon Papadimitropoulos**, *Partial-aperture array imaging in acoustic waveguides*, Inverse Problems, Vol. 32, p. 125011 (31pp), 2016.
- Chrysoula Tsogka, Dimitrios A. Mitsoudis and **Symeon Papadimitropoulos**, *Selective imaging of extended reflectors in two-dimensional waveguides*, SIAM J. Imaging Sci., Vol.6, 2714–2739, 2013

CONFERENCE PUBLICATIONS

- Chrysoula Tsogka, Dimitrios A. Mitsoudis, **Symeon Papadimitropoulos**, *Imaging extended reflectors in a two-dimensional waveguide*, 11th International Conference on Mathematical and Numerical Aspects of Waves, June 2013, Gammarth, Tunisia

UNDER PREPARATION

- **Symeon Papadimitropoulos**, Chrysoula Tsogka and Dimitrios A. Mitsoudis , *Partial-aperture array imaging in three-dimensional waveguides*.

PRESENTATIONS

ORAL PRESENTATIONS

- *Imaging extended reflectors in a terminating waveguide*, Graduate Student-Postdoc Seminar Series, ICERM Semester Program on "Mathematical and Computational Challenges in Radar and Seismic Reconstruction", November 30, 2017, ICERM/Brown University, U.S.A.
- *Imaging extended reflectors in a terminating waveguide*, Franco-German Summer School on Inverse Problems and Imaging, September 18 - 22, 2017, Bremen, Germany
- *Selective imaging of extended reflectors in a 2D waveguide*, MathMods Summer School on Mathematical Models for Social Innovation - Modelling Earthquakes, June 23 - July 4 2014, L'aquila, Italy

POSTER PRESENTATIONS

- *Imaging extended reflectors in a terminating waveguide*, Workshop on "Recent Advances in Seismic Modeling and Inversion: From Analysis to Applications", November 6 - 10, 2017, ICERM/Brown University, U.S.A.
- *Imaging extended reflectors in a terminating waveguide*, Workshop on "Mathematical and Computational Aspects of Radar Imaging", October 16 - 20, 2017, ICERM/Brown University, U.S.A.
- *Imaging extended reflectors in a terminating waveguide*, Workshop on "Waves and Imaging in Random Media", September 25 - 29, 2017, ICERM/Brown University, U.S.A.
- *Imaging of extended reflectors in two-dimensional waveguides*, Franco-German Summer School on Inverse Problems and PDEs, October 7 - 11, 2013, Bremen, Germany
- *Imaging of extended reflectors in two-dimensional waveguides*, Workshop on "Waves and imaging in complex media" June 11 - 15, 2012, Heraklion, Greece

TECHNICAL SKILLS

- Programming Languages: C, C++, Fortran, Python
- Tools: MatLab, Linux shell scripts
- Typesetting Tools: \LaTeX , Microsoft Office, OpenOffice
- Operating Systems: Linux, Windows, OS X

LANGUAGES

- **Greek**: Native
- **English**: Michigan Proficiency (ECPE), TOEFL iBT Score: 107/120 (Test Date: 09/12/2011)

PERSONAL INTERESTS

Martial Arts Tricking, Canyoning, Caving

REFERENCES

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Department of Energy Technology Engineering

Technological Educational Institute of Athens

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