# Antonios Meimaris

Ph.D. Candidate - Monash University

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Personal Details

Citizenship: Greek Languages: English, Greek, Russian

SHORT TERM ACADEMIC APPOINTMENTS

CE Lecturer - University of Liverpool, Liverpool, UK

November, 2017

Lecture Topic: History of Probability & Randomness

Visiting Scholar - Columbia University, New York, USA

May - June, 2017

Visiting Scholar - Columbia University, New York, USA

November - December, 2016

Collaborations

Stochastic Engineering Dynamics Lab, Columbia University

2015 - present

# **EDUCATION**

# Monash University, Melbourne, Australia

Doctor of Philosophy, Econometrics & Business Statistics, Expected award date: 2019

- Thesis Topic: Path integral techniques to stochastic modelling and options pricing
- Advisors: Athanasios A. Pantelous, Ph.D (Monash University, Australia),
   Dan Zhu, Ph.D (Monash University, Australia) and
   Ioannis A. Kougioumtzoglou, Ph.D (Columbia University, USA)

## University of Liverpool, Liverpool, United Kingdom

Doctor of Philosophy, Mathematics, Started: October 2016, Cont. at Monash University

- Thesis Topic: Path integral techniques to stochastic modelling and options pricing
- Advisors: Athanasios A. Pantelous, Ph.D (University of Liverpool, UK) and Ioannis A. Kougioumtzoglou, Ph.D (Columbia University, USA)

Master by Research, Decision Making Under Risk & Uncertainty, 2016

- Awarded with distinction
- Topic: Some observations on the approximations of the Wiener path integral technique
- Advisors: Athanasios A. Pantelous, Ph.D (University of Liverpool, UK) and Ioannis A. Kougioumtzoglou, Ph.D (Columbia University, USA)

### University of Athens, Athens, Greece

Diploma, Mathematics, 2015

- Four-year program
- Directions: Pure & Applied Mathematics
- Specializations: Computational Mathematics
   Statistics and Operations Research

## **PUBLICATIONS**

#### Published

- o **Antonios Meimaris**, Ioannis Kougioumtzoglou and Athanasios Pantelous, "A closed form approximation and error quantification for the response transition probability density function of a class of stochastic differential equations", Probabilistic Engineering Mechanics (2017).
- o Antonios Meimaris, Ioannis Kougioumtzoglou and Athanasios Pantelous, "Some observations on the approximations of the Wiener path integral technique", Meccanica dei Materiali e delle Strutture Vol. VI, no.1, (2016): 195-202.

#### Submitted

- o Konstantinos Liaskos, Athanasios Pantelous, Ioannis Kougioumtzoglou and **Antonios Meimaris**, "Implicit analytic solutions for the linear stochastic partial differential beam equation with fractional derivative terms", Systems & Control Letters, (2018), Under Review.
- o **Antonios Meimaris**, Ioannis Kougioumtzoglou and Athanasios Pantelous, "Approximate analytical solutions for a class of nonlinear stochastic differential equations", European Journal of Applied Mathematics, (2018), To Appear.

### In preparation

Antonios Meimaris, Ioannis Kougioumtzoglou and Athanasios Pantelous, "Closed-form approximate solutions and error quantification for a class of coupled nonlinear stochastic differential equations", (2018).

## **Preprints**

Antonios Meimaris, "On the additive persistence of a number in base p", (2015).

#### AWARDS

#### Monash Graduate Scholarship (MGS),

Autumn 2017

Postgraduate Research Studentship (2018-2021).

#### Monash International Tuition Scholarship (MITS),

Autumn 2017

Postgraduate International Tuition Studentship (2018-2021).

# EPSRC Centre for Doctoral Training (CDT): Award,

Summer 2017

including monetary prize, for a proposed solution to a statistical problem (estimators of unknown quantities and uncertainty quantification).

# EPSRC Centre for Doctoral Training (CDT): Studentship,

Summer 2015

Postgraduate Research Studentship (2015-2019).

#### Informatics Commendation Award of Athens College,

Summer 2011

for excellence in information technology.

#### Commendation, on a national level,

Summer 2011

for participating in the third and final stage of the 23rd Panhellenic Informatics Competition.

#### Commendation, on a national level,

Summer 2010

for participating in the third and final stage of the 22rd Panhellenic Informatics Competition.

#### Commendation, on an international level,

Winter 2009

for participating in the XVII International Space Olympics (ISO), Korolev City Moscow, Russia.

# Professional Development

### I have presented in the following events:

2017 EMI Conference

June 2017

San Diego, CA, USA

"Assessing the accuracy of the Wiener Path Integral technique for a class of stochastic differential equations"

2016 EMI International Conference

October 2016

University of Lorraine (Université de Lorraine), Metz, France

"Some observations on the approximations of the Wiener path integral technique"

\*Here I was a keynote speaker

Annual Showcase Conference

September 2016

University of Liverpool, Liverpool, United Kingdom

"Some observations on the approximations of the Wiener path integral technique"

\*Here I also presented a poster "Path integral techniques: Applications to financial modelling and options pricing"

2nd Symposium on Quantitative Finance and Risk Analysis (QFRA 2016)

June 2016

University of Liverpool, Liverpool, United Kingdom

"Some observations on the approximations of the Wiener path integral technique"

University of Athens Reading Group

February 2015

University of Athens, Athens, Greece;

"Making Change for n Cents"

Tutorial

February 2014

University of Athens, Athens, Greece;

"On sequences"

### I have attended the following events:

CDT Easter School 2017

University of Liverpool, Liverpool, United Kingdom

April 2017

NATCOR: Forecasting and Predictive Analytics

Lancaster University, Lancaster, United Kingdom

September 2016

3rd BCN(Barcelona) Summer School on Stochastic Analysis

Centre de Recerca Matemàtica, Bellaterra, Barcelona, Spain

June-July 2016

NATCOR: Convex Optimization

University of Edinburgh, Edinburgh, United Kingdom

June 2016

MIGSAA graduate course on stochastic pathwise integration and stochastic particle systems

University of Edinburgh, Edinburgh, United Kingdom

April 2016

CDT Easter School 2016

University of Liverpool, Liverpool, United Kingdom

April 2016

13th International Probabilistic Workshop (IPW2015)

University of Liverpool, Liverpool, United Kingdom

November 2015

9th Panhellenic Logic Symposium

National Technical University of Athens, Athens, Greece

June 2013

# TEACHING EXPERIENCE

I was a teaching and marking assistant for MATH367, an advanced graph theory course and a teaching assistant for MATH480, an advanced measure-theoretic probability theory course, at the University of Liverpool. I also was a marking assistant for MATH367, in the previous year at the University of Liverpool.

I was a teacher for a two month period in 2015 at Varvakios Pilot School, Greece, organized by the University of Athens, Greece. This placement provides useful experience since it helps prepare the student for teaching large classes, organizing a course, and also gives the student an opportunity to teach a few lectures.

I have been a tutorial assistant regularly since February 2014, in mathematics, with experience TA'ing the subjects of calculus, network theory with applications, algorithms and programming. A full list of courses that I have TA'ed is below.

### University of Liverpool

MATH480 - Probability Essentials for Financial Calculus

MATH367 - Networks in Theory and Practice

#### University of Athens

MATH141 - Computer Science I (MATLAB)

MATH101 - Calculus I

## OTHER WORK EXPERIENCE AND SKILLS

I received the Computer Literacy Certificate from the University of Athens, Greece, based on the number of Information Technology modules successfully passed.

I was a programmer responsible with developing Web-based software at Converge - ICT Solutions & Services, Greece during the summer of 2009.

During these years, I have acquired the following technical skills

- Programming: LATEX, MATLAB, Mathematica and others.
- Operating Systems: Apple Mac OS X, Linux, Microsoft Windows, Oracle Solaris and others.
- Application Software: Microsoft Office, OpenOffice, TeamViewer and others.

### Visits to International Research Centers

Hartree Centre, Science and Technology Facilities Council, UK

May 2016

European Organization for Nuclear Research (CERN), Switzerland

October 2010

Cosmonaut Preparation Center in Korolev City, Russia

October 2009

## Volunteer Service

Member of the organizing team of the CDT Easter School 2017,

2016 - 2017

University of Liverpool, Liverpool, UK.

Member of the organizing team of the forum of Department of Mathematics,

2013 - present

University of Athens, Athens, Greece.

Member of a number of Mathematics study groups (with a variety of subjects) and organizer of one, as a student at the University of Athens, Athens, Greece.

2013 - 2015