

## 1 Personal and Contact Information

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Citizenship: Greek ('Hellenic'), EEA.

## 2 Education

- *Doctor of Philosophy (PhD) in Applied Probability Theory (10/05-06/12)*

Heriot-Watt University, *Edinburgh, Scotland*

Department: Actuarial Mathematics and Statistics

Thesis title: Contact Processes and Interacting Particles (Accepted: 11/11)

- *Bachelor of Science (B.Sc.) in Statistics (09/00-10/04)*

Athens University of Economics and Business (AUEB), *Athens, Greece*

Major: Statistics

Graduated with distinction (*Summa Cum Laude*, 'Arista'), Class Valediction

## 3 Appointments

- *Hellenic military service, (08/18-09/18)*

Minimum compulsory service due to permanent resident-abroad status (awarded after 12+ consecutive years)

Thiva artillery training center

- *Postdoc U. de São Paulo, (06/17-06/18)*

Instituto de Matemática e Estatística

- *Postdoc U. de São Paulo, (06/16-06/17)*

Núcleo de Apoio á Pesquisa em Modelagem Estocástica e Complexidade

The NeuroMat Project

- *Postdoc U. de Buenos Aires (03/12 - 12/15)*

Facultad de Ciencias Exactas y Naturales

Departamento de Matemática

## 4 Areas of Teaching Expertise

### ♣ *Probability*

Introduction to Probability

Introduction to Stochastic Processes

Stochastic Processes

Probability and Measure

### ♥ *Statistics*

Introduction to Statistics

Mathematical Statistics

Simulation and MCMC

### ◆ *Miscellaneous*

Other topics: Calculus, Mathematical Analysis, Ergodic theory.

Applied Statistics: Bayesian Statistics, Risk Theory, Time Series

Graduate level: Probability on Graphs, Percolation Theory, Interacting Particle Systems, Random Walks.

## 5 Research

### 5.1 Publications

1. Tzioufas, A (2011). On the growth of the one-dimensional reverse immunization contact processes. *J. of Appl. Probability* **48(3)**: 611-623.
2. Tzioufas, A. (2011). Contact processes on the integers. Ph.D. Thesis, Heriot-Watt U.
3. Tzioufas, A. (2013). Convergence rates for the one-dimensional three state contact process. *J. of Stat. Physics* **152(2)**: 388-398.
4. Tzioufas, A. (2015). Regeneration of extremal particles for one dimensional contact processes. *Markov Proc. and Related Fields* **21(2)**: pp. 275-282.
5. Tzioufas, A. (2016). The entirely coupled region of supercritical contact processes. *J. of Appl. Probability* **53(3)**: 925-929.
6. Tzioufas A.(2017). The randomly fluctuating hyperrectangles are spatially monotone. *Stat. and Probab. Lett.* **130**: 76-79.
7. Tzioufas, A. The central limit theorem for supercritical oriented percolation in two dimensions. *J. of Stat. Physics.* **171(5)**: 802-821.

8. Tzioufas, A. Monotonicity and non-monotonicity of simple spatial epidemic models. *Braz. J. Probab. Stat.*. (Accepted, to appear.)
9. Tzioufas A. The several dimensional gambler's ruin problem. *Markov Proc. and Related Fields*. (Accepted, to appear.)
  - *Submitted*
10. Tzioufas A. On highly supercritical percolation in two dimensions.
  - *Ongoing works*
11. Tzioufas A. Multiple ergodic averages beyond stationary (26 pp.)
12. Tzioufas, A. On continuity of certain percolation quantities (10pp),
13. Tzioufas, A. A note on spatial monotonicity of one-dimensional spin systems (12pp).
  - *Completed research*
14. The Law of the Iterated Logarithm for supercritical 2D oriented percolation.
15. Tzioufas, A. Critical three state oriented percolation: strong survival of non-persistent processes.

## 5.2 Unpublished works

1. with Stan Zachary. New proofs of survival properties of the one-dimensional basic three-state contact process. (2007).
2. with Stan Zachary. Non-nearest neighbours one-dimensional three-state contact processes. (2009).

## 5.3 Grant Proposal

1. Tzioufas, A., (2017). Percolation and Random Walks.  
<https://arxiv.org/abs/1511.01813>

## 6 Languages

- English: Fluent. Full professional working proficiency.
- Spanish: Fluent. Professional working proficiency.
- Portuguese: Advanced level. Working proficiency.
- Greek: Native speaker

## **7 Academic Services**

- Mentoring: PhD and Postdocs research advising at UBA and USP.
- Academic Service: Reviewer for various Journals (anonymous).

## **8 PC Skills**

- IT : LaTeX, TeX, MS Windows, MS Office
- Programming: Matlab, R, Spss, Minitab.

## **9 Scholarships**

- PNPd/Capes 07/17-07/18
- Fapesp, 06/16-06/17
- Agencia and Conicet Studentships, 03/13-03/14 and 03/14-10/15
- Heriot-Watt PhD Studentship 10/05-10/08
- State scholarship in 3rd and 4th year of Bsc studies

## **10 Conferences, talks and academic visits (Partial list)**

- Visiting Professor posts held: IMPA, Rio de Janeiro (12/12-02/13); U of Sao Paulo (10/13-12/13); Heriot-Watt University, Edinburgh (02/16-05/16).
- Conferences Attended (week-long): Eurandom, Eindhoven 2006 ; Bath, School 2007 ; Cimpa School, Mar del plata 2012, SPA, Buenos Aires 08/14; CLAPEM, Cartagena de Indias, Colombia, 09/2014; Athens probability Colloquium 2014 and 2015; Cimpa School, Buenos Aires, July 6-17, 2015. 12/2016, Santiago, Chile, CMM. Escola Brasileira de Probabilidade 08/17.
- Invited talks (week-long visits): USP at Sao Carlos (02/14-02/14); Pontificia U Catolica de Chile (03/14); U of Athens, Kapodistriako (06/14); Brazilian School of probability (08/14); American U of Beirut (02/16); University of Bielfeld (05/17). Universidade de São Paulo (09/17)

September 26, 2018  
A. Tzioufas