

1 Personal and Contact Information

Name: Achilles Tzioufas (offic. Achillefs).

Website: <http://www.achillefstzioufas.com>

Preprints site: https://arxiv.org/a/tzioufas_a_1.html

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2 Education

- *Doctor of Philosophy (PhD) in Probability & Statistics (10/05-06/12)*

Heriot-Watt University, *Edinburgh, Scotland*

Department: Actuarial Mathematics and Statistics

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

Adviser: Stan Zachary

- *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 ('Arista' - Summa Cum Laude equivalent)

Valediction of Statistics Dept.

Mentors: Harry Pavlopoulos and Michael Zazanis

3 Appointments

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

Departamento de Matemática, Facultad de Ciencias Exactas

Prof. P.A. Ferrari

- *Postdoc U. de São Paulo, 06/16-*

Instituto de Matemática e Estatística

Profs. F. P. Machado, L. R. Fontes, J. A. Galves

4 Research

4.1 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.)
 - o *Submitted*
10. Tzioufas A. On highly supercritical percolation in two dimensions.
 - o *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).
 - o *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.

4.2 Unpublished works

- *Unpublished reports*

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).

- *Grant Proposal*

3. Tzioufas, A., (2017). Percolation and Random Walks.

5 Areas of Teaching Expertise

- ♣ *Graduate courses*

Advanced topics in Probability Theory. Percolation Theory, Interacting particle systems, Random Walks, Ergodic theory, Statistical mechanics.

- ◆ *Probability*

Introduction to Probability Theory (various levels); Probability with Martingales; Stochastic Processes. Mathematical Analysis; Linear Algebra; Measure Theory.

- ♥ *Statistics*

Mathematical Statistics; Bayesian Statistics; Simulation and MCMC; Risk Theory; Time Series.

- ♠ *Distinct Experience*

Taught classes for various modules in Probability and Statistics at HWU and at AUEB (Markov chains and Random walks, Prof. T. Konstantopoulos, and Stochastic Processes and Game Theory, Prof. M. Zazanis.)

6 PC Skills, Services

6.1 PC Skills

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

6.2 Academics

- Mentoring: PhD and Postdocs research advising at UBA and USP.
- Invitation for Editorial board member of the Open statistics & probability journal (rejected).
- Academic Service. Reviewer for various Probability Journals.

7 Languages

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

8 Demographics

- Born: Greece, 23.02.1982.
- Citizenship: Greek (EEA).
- Permanent resident-abroad (awarded after 12+ consecutive years).
- Civil status: not married

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

- 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)

11 Referees

- Prof. Pablo Ferrari (University of Buenos Aires, Argentina)
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- Prof. Nicolas Lanchier (Arizona State University, US)
480-965-3870 ; [nlanchie@asu.edu]
- Prof. Michael Damron (Georgia Tech, US) [mdamron6@gatech.edu]; +1 404-894-4311
- Prof. Jan Swart (UTIA, Czech Republic). [swart@utia.cas.cz], 420-26605-2584
- Prof. Thomas Mountford (EPFL, Switzerland, Chair of Stochastic Processes)
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- Prof. Emeritus Stan Zachary (Heriot-Watt University, Scotland)
+441314513203 ; [s.zachary@hw.ac.uk]
- Prof. Cristian Coletti (UFABC, Brazil). [cristian.coletti@ufabc.edu.br]

June 10, 2018
A. Tzioufas