Curriculum Vitae Eleni Vatamidou

- INRIA Sophia Antipolis Méditerranée,
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EMPLOYMENT AND ACADEMIC POSITIONS



June 2017 – today	Postdoctoral Research Fellow, University of Lausanne, Switzerland. Supervisor: H. Albrecher.
June 2016 – May 2016	Postdoctoral Research Fellow, INRIA Sophia Antipolis – Méditerranée, France. Supervisor: A. Jean-Marie.
Jan. 2015 – Dec. 2015	Visiting Research Assistant, Department of Mathematics and Computer Science, Eindhoven University of Technology, the Netherlands.
Nov. 2010 – Dec. 2014	Graduate Research Assistant, Department of Mathematics and Computer Science, Eindhoven University of Technology, the Netherlands.

EDUCATION

ACADEMIC DEGREES

Nov. 2011 – June 2015	PhD diploma in Mathematics , Department of Mathematics and Computer Science, Eindhoven University of Technology, the Netherlands. SUPERVISORS: I.J.B.F. Adan, M. Vlasiou, A.P. Zwart. THESIS COMMITTEE: I.J.B.F. Adan, H. Albrecher, B. Van Houdt, G.J.J.A.N. van Houtum, Z. Palmowski, M. Vlasiou, A.P. Zwart.
Sep. 2008 – June 2010	Masters in Statistics and Modelling (degree grade: 9/10), Department of Mathematics, Aristotle University of Thessaloniki, Greece. THESIS ADVISOR: G. Tsaklidis.
Sep. 2003 – July 2007	Bachelors in Mathematics (cum laude – degree grade: 8.75/10), Aristotle University of Thessaloniki, Greece.

CERTIFICATIONS

- Oct. 2013 **BETA Education Certificate**, Beta Research School for Operations Management and Logistics, the Netherlands.
- Jan. 2013 LNMB Diploma, Landelijk Netwerk Mathematische Besliskunde, the Netherlands.
- Jan. 2006 Diploma in Piano, Macedonian Music School of Thessaloniki, Greece.
- June 2001 **Diploma in Harmony**, Macedonian Music School of Thessaloniki, Greece.

ACADEMIC HONOURS AND AWARDS

HONOURS

• Marie Sklodowska-Curie Actions Seal of Excellence Certificate for the project proposal "750384, High-PART – High precision approximations in risk theory with heavy tails" submitted under the call H2020-MSCA-IF-2016, European Commission.

- 3rd prize for the Best Paper Award in the 8th Conference in Actuarial Science & Finance, May 2014, Samos.
- Marcel Neuts Student Paper Award, MAM8, January 2014, Kerala, India.
- **University and college honours** for graduating Aristotle University of Thessaloniki with degree grade 8.75/10 in 2007.
- Award for excellence in undergraduate studies for the academic year 2005–2006, Greek State Scholarships Foundation.

SCHOLARSHIPS

- Full scholarship for post-graduate studies from the legacy of K. Katseas, Aristotle University of Thessaloniki, 2011–2014 (3 years of 12-month salary).
- Erasmus grant for attendance of the Masters programme at the university of Wrocław. European Union, Education, Audiovisual and Culture Agency Executive Agency, 2012–2013.
- Scholarship for excellence in undergraduate studies. Greek State Scholarships Foundation, 2006.

GRANTS

• Workshop subsidies for MOMI2017: AMIES , SMAI , and UCA (total amount: 4800€).

PUBLICATIONS

THESES

- [T1] E. Vatamidou (2015). Error analysis of structured Markov chains. PhD thesis, Eindhoven University of Technology, Eindhoven, the Netherlands. ISBN: 978-90-386-3878-2.
- [T2] E. Vatamidou (2010). Matrix exponential and phase type distributions in renewal and risk theory. Master thesis, Aristotle University of Thessaloniki, Greece.

JOURNAL PUBLICATIONS

- [J1] M. Udenio, E. Vatamidou, J.C. Fransoo, and N.P. Dellaert (2017). Behavioral Causes of the Bullwhip Effect: an Analysis Using Linear Control Theory. IISE Transactions. *Published online*.
- [J2] E. Vatamidou, I.J.B.F. Adan, M. Vlasiou, and B. Zwart (2014). Corrected phase-type approximations of heavytailed queueing models in a Markovian environment. Stochastic Models 30 (4), 598–638.
- [J3] E. Vatamidou, I.J.B.F. Adan, M. Vlasiou, and B. Zwart (2014). On the accuracy of phase-type approximations of heavy-tailed risk models. Scandinavian Actuarial Journal 2014 (6), 510–534.
- [J4] E. Vatamidou, I.J.B.F. Adan, M. Vlasiou, and B. Zwart (2013). Corrected phase-type approximations of heavytailed risk models using perturbation analysis. Insurance Mathematics and Economics 53(2), 366–378.
- [J5] E. Vatamidou, I.J.B.F. Adan, M. Vlasiou, and B. Zwart (2013). Corrected phase-type approximations for the workload of the MAP/G/1 queue with heavy-tailed service times. ACM SIGMETRICS Performance Evaluation Review 41(2), 53–55.

REFERRED CONFERENCE PROCEEDINGS

- [C1] E. Vatamidou, I.J.B.F. Adan, M. Vlasiou, and B. Zwart (2016). Asymptotic error bounds for truncated buffer approximations of a 2-node tandem queue. MAM9 2016.
- [C2] E. Vatamidou, I.J.B.F. Adan, M. Vlasiou, and B. Zwart (2014). Corrected phase-type approximations of heavytailed queueing models in a Markovian environment. MAM8 2014. Received the Marcel Neuts Student Paper Award.

WORKING PAPERS (SUBMITTED/UNDER PREPARATION)

- [W1] A. Jean-Marie and E. Vatamidou. Markov Regenerative Accumulation Processes: A class of stochastic processes from the family of Markov Regenerative Processes. *Under preparation.*
- [W2] M. Udenio, J.C. Fransoo, and E. Vatamidou. Seasonal forecasting and the bullwhip effect: a control theoretic analysis. *Under preparation*.

RESEARCH TALKS

INVITED TALKS

- May 2016 Phase-type distributions, Matrix-Analytic Methods, and applications. Department of Mathematics, Aristotle University of Thessaloniki. Host: Prof. Dr. George Tsaklidis.
- Nov. 2015 The use of Markov renewal theory and extreme value analysis to find asymptotic error bounds for truncated approximations. Department of Mathematics, Aristotle University of Thessaloniki. Host: Prof. Dr. George Tsaklidis.
- March 2014 Corrected phase-type approximations of heavy-tailed stochastic models using perturbation analysis. Department of Econometrics (Erasmus School of Economics), Erasmus University Rotterdam. Host: Dr. Remy Spliet.
- May 2013 Error bounds for spectral approximations of heavy-tailed risk models. Mathematical Institute, University of Wrocław. Host: Prof. Dr. Zbigniew Palmowski.
- March 2013 Corrected phase-type approximations of heavy-tailed risk models using perturbation analysis. Workshop Queues and Risk, EURANDOM, March 4–7.
- Nov. 2012 Approximation errors for the MAP/G/1 queue. Workshop YEQT VI, Analytic Methods in Queueing Systems, EURANDOM, November 1–3.

CONFERENCE PRESENTATIONS

- June 2016 Asymptotic error bounds for truncated buffer approximations of a 2-node tandem queue. MAM9 2016 9th International Conference on Matrix Analytic Methods in Stochastic Models, Budapest, Hungary, June 28–30.
- May 2016 Fitting heavy-tailed claims to mixtures of phase-type and heavy-tailed distributions. ASF 2016 9th Samos Conference in Actuarial Science and Finance, Samos, Greece, May 18–22.
- Aug. 2014 Improved approximations for performance measures of stochastic models. ECQT 2014 First European Conference on Queueing Theory, Ghent, Belgium, August 20–22.
- July 2014 Improved approximations of heavy-tailed risk models using perturbation analysis. IME 2014 The 18th International Congress on Insurance: Mathematics and Economics, Shanghai, China, July 10–12.
- May 2014 Corrected phase-type approximations of heavy-tailed risk models using perturbation analysis. ASF 2014 8th Samos Conference in Actuarial Science and Finance, Samos, Greece, May 29 June 1. Received **3rd prize for the Best Paper Award**.
- Jan. 2014 Corrected phase-type approximations of heavy-tailed queueing models in a Markovian environment. MAM8 2014 – 8th International Conference on Matrix Analytic Methods in Stochastic Models, Kerala, India, January 6–10.
- Oct. 2013 Corrected phase-type approximations of heavy-tailed models in applied probability using perturbation analysis. 7th Beta Conference 'Dynamic Pricing', Eindhoven University of Technology, Eindhoven, the Netherlands, October 30–31.
- Sep. 2013 Corrected phase-type approximations for the workload of the MAP/G/1 queue with heavy-tailed service times. 31st International Symposium on Computer Performance, Modeling, Measurements and Evaluation (IFIP WG 7.3 Performance 2013), Vienna, Austria, September 24–26.

July 2013	Corrected phase-type approximations of heavy-tailed stochastic models using perturbation analy- sis. Satellite Summer School to the 7th International Conference on Lévy Processes, Mathematical Research and Conference Center of the Institute of Mathematics of the Polish Academy of Sciences in Będlewo, Poland, July 9–13.
June 2013	Corrected phase-type approximations for heavy-tailed risk models in a Markovian environment. International Cramér Symposium on Insurance Mathematics, Stockholm, June 11–14.
Jan. 2013	Improved approximations for the $M/G/1$ queue. 38th Conference on the Mathematics of Operations Research, Lunteren, the Netherlands, January 15–17.
June 2012	On the accuracy of phase-type approximation of heavy-tailed risk models. IWAP 2012 – International Workshop on Applied Probability, Jerusalem, Israel, June 11–14.
Jan. 2012	On the accuracy of phase-type approximations of heavy-tailed risk models. 37th Conference on the Mathematics of Operations Research, Lunteren, the Netherlands, January 17–19.
Posters	
June 2014	Corrected phase-type approximations for heavy-tailed queueing models in a Markovian environ- ment – The 2014 Stochastic Networks Conference, Amsterdam, the Netherlands, June 23–27.

- Nov. 2013 Corrected phase-type approximations for the workload of the MAP/G/1 queue with heavy-tailed service times Workshop YEQT VII, Scheduling and Priorities in Queueing Systems, EURANDOM, November 4–6.
- July 2013 Corrected phase-type approximations for the workload of the MAP/G/1 queue with heavy-tailed service times 7th International Conference on Lévy Processes: Theory and Applications, Wrocław, Poland, July 15–19.

OTHER PRESENTATIONS

- Jan. 2017 Markov Regenerative Accumulation Processes. ANR MARMOTE meeting, Inria, Sophia Antipolis, France, January 11.
- Oct. 2016 Markov Additive Processes and approximation algorithms for their performance measures. 13th Maestro retreat, Antibes-Juan-les-Pins, France, October 12–13.
- 2014 Personal and Research presentation. Department Dialogue, Eurandom, Eindhoven, the Netherlands, April 17.

TEACHING EXPERIENCE

COURSES TAUGHT

- 2010 1014 Graduating teaching assistant, Eindhoven University of Technology.
 - Wiskunde 2 (2DD50), Fall 2013–2014 (Semester A Quartile 2).
 - Stochastic Operations Research (2DD27), Fall 2011–2012 (Semester A Quartile 1) and Fall 2012–2013 (Semester A Quartile 1).
 - Calculus variant B (2WBB0), Fall 2012–2013 (Semester A Quartile 1)
 - Calculus A (2DL04b), Spring 2010–2011 (Semester B Quartile 2), Spring 2011–2012 (Semester B Quartile 2), and Spring 2012–2013 (Semester B Quartile 2).
 - Statistics 1 (2DD29), Spring 2010–2011 (Semester B Quartile 1) and Spring 2011–2012 (Semester B Quartile 1).

INDEPENDENT STUDY WITH GRADUATE STUDENTS

Spring 2016 Elina Sergidou. "Fitting heavy-tailed claims to mixtures of phase-type and heavy-tailed distributions". *Presented at the ASF 2016 conference*.

PROFESSIONAL SERVICE

CONFERENCE ORGANISATION

- Organisation of the 2nd International mini-symposium SAMMA 2017 Stochastic Models: Methods and Applications, organised in conjunction with the 15th International Conference of Numerical Analysis and Applied Mathematics (ICNAAM 2017), September 25–30, 2017, Thessaloniki, Greece.
- Organisation of the 1rst MOMI workshop Le Monde des Mathématiques Industrielles, supported by Inria Sophia Antipolis Méditerranée and financed by Université Côte d'Azur, SMAI, and AMIES, February 27–28, 2017, Inria Sophia Antipolis, France.

TECHNICAL JOURNAL OR CONFERENCE REFEREE ACTIVITIES

- Technical program committee member of the 1rst International mini-symposium SAMMA 2016 Stochastic Models: Methods and Applications, organised in conjunction with the 14th International Conference of Numerical Analysis and Applied Mathematics (ICNAAM 2016), September 19–25, 2016, Rhodes, Greece.
- Referee for:
 - Journals: Quality Technology & Quantitative Management (QTQM), Scandinavian Actuarial Journal (SAJ), IIE Transactions, Mathematical Methods of Operations Research (MMOR), Insurance Mathematics and Economics (IME), and TOP.
 - **Conferences:** The 32nd International Symposium on Computer Performance, Modeling, Measurements and Evaluation 2014 – IFIP Performance 2014.

CAMPUS CONTRIBUTIONS

- PhD representative at LNMB (Dutch Network on the Mathematics of Operations Research) for the year 2013.
- TU/e and Mathematics & Computer Science Ambassador, Eindhoven University of Technology.

SKILLS

LANGUAGES			
Greek	Native speaker.		
English	Fluent, C2 – Certificate of Proficiency in English, Cambridge University.		
Dutch	Basic, self-study.		
French	Basic, A2 – DELF.		
Computer	R SKILLS		
Operating Sv	stems Windows (XP, 7, 8.1), Mac OS X, iOS, Android.		

Programming Languages	Mathematica, S-plus, Fortran, Matlab.
Software	LATEX, Microsoft Office (Word, Excel, Power Point), SPSS.

DEVELOPMENT

- Attendance of the course *Writing Articles and Abstracts in English*, offered by TU/e.
- Attendance of the PROOF course *The Art of Presenting Science*, offered by TU/e.
- Participation in the ASML PhD MasterClass 2014, Eindhoven, the Netherlands, March 28–29.