Dr. Stella Kapodistria

Assistant Professor

MF 4.71b, Department of Mathematics and Computer Science
Eindhoven University of Technology
P.O. Box 513, 5600 MB Eindhoven, The Netherlands

(+31) 06 - 539 532 09 | s.kapodistria@tue.nl | www.win.tue.nl/∼skapodis

"We cannot solve our problems with the same thinking we used when we created them."
Albert Einstein

Education and employment

Education

Ph.D. in Mathematics (Summa Cum Laude) *Sep 4, 2009*

Department of Mathematics, University of Athens, Greece

Thesis title: *Stationary Performance Evaluation Measures in Multi-dimensional Markov chains and Applications in Queueing Theory*
Supervisor: Prof. dr. A. Economou

M.Sc. in Statistics and Operations Research (Summa Cum Laude) *May 8, 2007*

Department of Mathematics, University of Athens, Greece

Thesis title: *Algorithmic Techniques on Markov Chains: Matrix Analytic Methods and Applications*
Supervisor: Prof. dr. A. Economou

B.Sc. in Mathematics *Mar 2, 2004*

Department of Mathematics, University of Athens, Greece

Major: Applied Mathematics
Minor: Statistics and OR

Professional experience

Assistant Professor *Aug 2014 – Present*

Department of Mathematics and Computer Science, Eindhoven University of Technology, the Netherlands

(100% fte, tenure-track, successful tenure assessment on Feb 2018)

Assistant Professor *Aug 2013 – Aug 2014*

Faculty of Economics and Business, University of Groningen, the Netherlands

(100% fte, 50% teaching, fixed-term)

Postdoctoral Research Fellow *Mar 2011 – Aug 2013*

Department of Mathematics and Computer Science, Eindhoven University of Technology, the Netherlands

Supervisors: Prof. dr. ir. I.J.B.F. Adan, Prof. dr. ir. O.J. Boxma, and Prof. dr. J.S.H. van Leeuwaarden
(100% fte, fixed-term)

Lecturer (visiting) *Sep 2009 – Feb 2011*

Department of Statistics and Actuarial - Financial Mathematics, University of the Aegean, Greece

(100% fte, fixed-term)

Teaching Assistant *Oct 2003 – Jun 2009*

Department of Mathematics, University of Athens, Greece

(20% fte, fixed-term)

Postgraduate Research *Nov 2003 – Jun 2006*

Department of Mathematics, University of Athens, Greece

Research program "Pythagoras" under the Operational Program for Education and Initial Vocational Training
Project title: *Evaluation of Performance Measures and Study of Certain Queueing Systems*
PIs: Prof. dr. A. Burnetas and Prof. dr. A. Economou
(20% fte, fixed-term)

Research

Research areas keywords

Applied Probability; Stochastic Processes; Queueing Theory; Data-Driven Decision Making; Maintenance.

Research directions

RD-QS: Performance analysis of queueing systems

RD-PS: Power systems modelling and analysis

RD-DM: Data-driven decision making under uncertainty

Publications

Publications in international refereed journals

1. M. Mayank, O.J. Boxma, S. Kapodistria, and R. Núñez Queija. Two queues with random time-limited polling. To appear in *Probability and Mathematical Statistics (PMS)*, 2017.**(RD-QS)**
2. S. Kapodistria and Z. Palmowski. Matrix geometric approach for random walks: stability condition and equilibrium distribution. *Stochastic Models* 33(4), 572–597, 2017.**(RD-QS)**
3. J. Selen, I.J.B.F. Adan, S. Kapodistria, and J.S.H van Leeuwaarden. Steady-state analysis of the shortest expected delay routing. *Queueing Systems* 84(3-4), 309–354, 2016.**(RD-QS)**
4. S. Kapodistria, T. Phung-Duc, and J.A.C. Resing. Linear birth/immigration-death process with binomial catastrophes. *Probability in the Engineering and Informational Sciences* 30(01), 79–111, 2016.**(RD-QS)**
5. I.J.B.F. Adan, O.J. Boxma, S. Kapodistria, and V. Kulkarni. Shortest queue polling model. *Annals of Operations Research* 241(1-2), 167–200, 2016.**(RD-QS)**
6. O.J. Boxma, S. Kapodistria, and M.R.H. Mandjes. Performance analysis of stochastic networks. *Nieuw Archief voor Wiskunde* 5(3), 193–200, 2015.**(RD-QS)**
7. I.J.B.F. Adan, S. Kapodistria, and J.S.H. van Leeuwaarden. Erlang arrivals joining the shorter queue. *Queueing Systems* 74(2-3), 273–302, 2013.**(RD-QS)**
8. S. Kapodistria and G. Psarrakos. Some extensions of the residual lifetime and its connection to the cumulative residual entropy. *Probability in the Engineering and Informational Sciences* 26(1), 129–146, 2012.
9. S. Kapodistria. A single server queue with synchronised abandonments. *Queueing Systems* 68(1), 79–109, 2011.**(RD-QS)**
10. A. Economou, S. Kapodistria, and J.A.C. Resing. Synchronised services in a single server queue. *Stochastic Models* 26(4), 1–32, 2010.**(RD-QS)**
11. A. Economou and S. Kapodistria. Synchronised abandonments in a single server unreliable queue. *European Journal of Operational Research* 203(1), 143–155, 2010.**(RD-QS)**
12. I.J.B.F. Adan, A. Economou, and S. Kapodistria. Synchronised reneging in queueing systems with vacations. *Queueing Systems* 62(1-2), 1–33, 2009.**(RD-QS)**
13. A. Economou and S. Kapodistria. q-series in Markov chains with binomial transitions: studying a queue with synchronisation. *Probability in the Engineering and Informational Sciences* 23(1), 75–99, 2009.**(RD-QS)**

Publications in conference proceedings

14. C. Beentjes, D. Chainikov, M. Croci, J.P. van der Gaast, S. Kapodistria, S. Rahimi-Ghahroodi, F. Sloothaak, F.C.R. Spieksma. Optimal order picking from a large retailer warehouse. *Proceedings of the Study Group Mathematics with Industry (SWI)*, 2018. Preprint[(RD-DM)]

15. A. Babiv, M. Bazhba, F. Beckebanze, M. Dimovski, A. Correia, E. Costa e Silva, M. Dimovski, R. Fitzner, S. Kapodistria, D. Koops, W. Moerkens, I. van Heuven van Staereling, X. op de Hoek, B. Sevenster, and J. Tang. The fair value of a mortgage. *Proceedings of the Study Group Mathematics with Industry (SWI)*, 2017.

16. S. Kapodistria and Z. Palmowski. A matrix geometric approach for random walks in the quadrant. *Proceedings of the Ninth International Conference on Matrix-Analytic Methods in Stochastic Models (MAM9)*, 2016.[(RD-QS)]

17. S. Kalosi, S. Kapodistria, and J.A.C. Resing. Condition-based maintenance at both scheduled and unscheduled opportunities. *Proceedings of the 9th IMA International Conference on Modelling in Industrial Maintenance and Reliability (MIMAR)*, 2016.[(RD-DM)]

18. J. Selen, I.J.B.F. Adan, and S. Kapodistria. Approximate performance analysis of generalised join the shortest queue routing. *Proceedings of the 9th EAI International Conference on Performance Evaluation Methodologies and Tools. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering)*, 2016.[(RD-QS)]

19. N. Bansal, D. Bourne, M. Firat, M. de Graaf, S. Kapodistria, K. Kumar, C. Meerman, M. Mitici, F. Nardi, B. de Rijk, S. Sarswat, and L. Scardia. Optimisation of lifetime in sensor networks. *Proceedings of the Study Group Mathematics with Industry (SWI)*, 2012.[(RD-PS)]

20. T. Phung-Duc, S. Kapodistria, and J.A.C. Resing. Markovian stochastic models with linear and binomial transition rates. *Proceedings of the Japan Queueing Symposium*, 2012.[(RD-QS)]

Articles submitted/under preparation

21. T.A. Kenbeek, S. Kapodistria, and A. Di Bucchianico. Data-driven online monitoring of wind turbines. Preprint Arxiv / Submitted[(RD-PS)]

22. S. Kapodistria, S. Kolumbán, and N. Nooraee. Comparison of models for highly autocorrelated data - power output prediction. Preprint Arxiv / Submitted[(RD-PS)]

23. D. Bhaumik, D.T. Crommelin, S. Kapodistria, and A.P. Zwart. Simple, discrete time stochastic models for wind park power output. Preprint / Submitted[(RD-PS)]

24. P. De Andrade Serra and S. Kapodistria. Properties of Bayesian updates for CBM models. Preprint[(RD-DM)]

25. S. Kapodistria and P. De Andrade Serra. Replacement policies with Bayesian learning. Preprint[(RD-DM)]

26. M. Gösgens, S. Kolumbán, and S. Kapodistria. Dynamically adaptive age-based modelling and optimal replacement policy. Preprint[(RD-DM)]

27. S. Kapodistria, Z. Palmowski, and S. Shneer. Synchronised reneging in two queues in parallel. Preprint[(RD-QS)]

28. S. Kapodistria and Z. Palmowski. Replacement policies for complex degradation signals. Preprint[(RD-DM)]

29. C. Drent, S. Kapodistria, and J.A.C. Resing. Condition-based maintenance with partial repairs at both scheduled and unscheduled opportunities.[(RD-DM)]

30. R.W. van der Hofstad, S. Kapodistria, Z. Palmowski, and S. Shneer. Overview of first passage times calculations for double thresholded processes and applications in optimal dividend strategies.

31. S. Kapodistria. Equilibrium balking strategies in a single server queue with server vacations and impatient customers. Preprint[(RD-QS)]

32. S. Kapodistria, A.P. Zwart, and A. Di Bucchianico. CBM scheduling based on multivariate SCP, treating false alarms. Preprint[(RD-DM)]

33. S. Kapodistria and A. Di Bucchianico. Literature overview paper: Data pooling and sensor fusion in Maintenance. Preprint[(RD-DM)]

34. S. Kapodistria and A.P. Zwart. Heavy traffic analysis in Binomial models.[(RD-QS)]

35. T. Phung-Duc, J.A.C. Resing, S. Kapodistria, and A. Economou. Retrial queueing systems with synchronised abandonments.[(RD-QS)]

36. S. Kapodistria, M. Vlasiou, U. Yechiali, and N. Perel. Multi-dimensional queueing models with abandonments and priorities.(RD-QS)

37. S. Kapodistria, M. Vlasiou, U. Yechiali, and E. Perel. Customer reneging.(RD-QS)

38. S. Kapodistria and D. Roy. Semi-open queueing systems.(RD-QS)

Technical reports

39. S. Kapodistria. Derivation of the degradation process based on a monitoring procedure. Preprint(RD-PS)

Books

40. S. Kapodistria. *Stationary Performance Evaluation Measures in Multidimensional Markov Chains and Applications in Queueing Theory*. Ph.D. Dissertation, University of Athens, 2009.(RD-QS)

Textbooks

41. S. Kapodistria. Textbook: *Financial Mathematics*, Eindhoven University of Technology, 2018.

42. S. Kanta and S. Kapodistria. Textbook (in Greek): *Operations Research*, University of Athens, 2008.

43. S. Kanta, S. Kapodistria and T. Xifara. Textbook (in Greek): *Statistics II*, University of Athens, 2008.

44. S. Kapodistria and N. Vlahos, Textbook (in Greek): *LaTex Guide*, University of Athens, 2006.

Contribution to books

45. S. Kapodistria and E. Kyrgia. Tragedy = 0,627389 - 0,201533*Comedy. Invited paper. Stefanos: Honorary bid for Walter Puchner (Editor: Joseph Vivilakis). Ergo Publications, 2007.

Posters

46. M. Gösgens, S. Kolumbán, and S. Kapodistria, Preventive maintenance of assets with usage dependent failure mechanisms, DSC/e Summit, Eindhoven University of Technology, 2017.(RD-DM)

47. D. Bhaumik, D.T. Crommelin, S. Kapodistria, and A.P. Zwart. Simple, discrete time stochastic models for wind park power output. Computational sciences: future energy systems conference, Utrecht, 2016.(RD-PS)

48. S. Kapodistria. Coordinated Advanced Maintenance and Logistics planning for the Process Industries, SOMF, Tilburg, 2014.(RD-DM)

External funding

Grants

High Tech for a sustainable future *Period: Jun 2018 – Jan 2022*

4TU.Federation *Total amount: 4.465.000€ (15 TT positions)*

Project title: *Designing Systems for Informed Resilience Engineering (DeSIRE)*
PI: Prof.dr. T. Filatova
Project partners: TU/e, DelftTU, UTwente, WUR

Big Data: real time ICT for logistics – Compartment 2 *Period: Jan 2018 – Jan 2022*

NWO *Total amount: 928.808€ (2Ph.D.+2P.D.)*

Project title: *Real-time Data-driven Maintenance Logistics*
PI: Prof.dr.ir. G.J.J.A.N. van Houtum
Project partners: TU/e, DelftTU, Philips, NS (NedTRain), Fokker Services

R&D projecten TKI Wind op Zee *Period: Sep 2014 – Jun 2017*

TKI WoZ *Total amount: 1.324.084€ (R&D)*

Project title: *Daisy4offshore – Dynamic Asset Information System for Off-Shore Wind Farm Optimisation*
Leading partner: Delta Infra B.V.
Project partners: TU/e, KEC Engineering & Consultancy B.V., ECN, IJssel Technologie, IMS, and DI-WCM

Center subsidies

4TU Resilience Engineering (4TU.RE) center *Period: Jan 2018 – Jan 2022*

4TU.Federation *Total amount: 600.000€*

Workshop subsidies

Data-Driven OM workshop *Nov 2016*

Sponsors: Networks, TKI Dinalog, Beta Research School, DSC/e, STAR, and 4TU-Ami *Total amount: 28.000€*

YEQT *Nov 2012*

Sponsors: STAR and 4TU-Ami *Total amount: 8.500€*

Visitors subsidies

Z. Palmowski *Oct 2016*

Sponsor: Networks

O. Kella *Aug 2016*

Sponsor: STAR

M. Telek *Jan 2016*

Sponsors: STAR and 4TU-Ami

Scholarships

Full scholarship for Ph.D. Studies *2006 – 2009*

Sponsor: Greek State Scholarships Foundation *Total amount: 16.400€*

Award (1st place) for excellence in M.Sc. studies *2006*

Sponsor: University of Athens *Total amount: 1.500€*

Research grant *2003 – 2006*

Sponsor: Research program “Pythagoras” under the Operational Program for Education and Initial Vocational Training *Total amount: 6.500€*

Project title: *Evaluation of Performance Measures and Study of Certain Queueing Systems*

Coaching research work

Ph.D. student supervision

C. Drent *Starting date: Jan 2018*

Promotor: Prof. dr. ir. O.J. Boxma *M&CS, TU/e*

TU/e – Philips Flagship

M. Saxena *Starting date: Nov 2015*
Promotor: Prof. dr. ir. O.J. Boxma *M&CS, TU/e*
NWO TOP project: Two-dimensional Models in Queues and Risk

Collaboration with Ph.D. students

J. Selen *Defence date: Sep 2017*
Promotor: Prof. dr. J.S.H. van Leeuwaarden *M&CS, TU/e*
Thesis title: *Analysis of Structured Multi-Dimensional Markov Processes*

D. Bauhmik *Defence date: 2018*
Promotor: Prof. dr. D.T. Crommelin *UvA*

Ph.D. committees

E. Sherzer *Defence date: Oct 2016*
Supervisors: Prof. dr. Joseph Kreimer and Dr. Yoav Kerner *Ben Gurion University of the Negev*
Thesis title: *Customer's Abandonments Strategy in Queuing Systems*

L.C. Smit *Defence date: May 2016*
Promotor: Prof. dr. W.Th.F. den Hollander *Leiden University*
Thesis title: *Steady State Analysis of Large-Scale Systems: The Successive Lumping Method*

M.Sc. student (co-)supervision

E. Johannesson *Defence date: Feb 2019*
Internship and graduation project, M.Sc. in Industrial and Applied Mathematics *M&CS, TU/e*
Thesis title: *Combining smart maintenance policies*

R.C. Gȕdlach *Defence date: Feb 2019*
Internship project, M.Sc. in Industrial and Applied Mathematics *M&CS, TU/e*
Thesis title: *Prescriptive decision making*

J.R.J. Steenman *Defence date: Jul 2018*
Graduation project, M.Sc. in Industrial and Applied Mathematics *M&CS, TU/e*
Thesis title: *What is the sufficient amount of stocks to hold for a large, long term institutional investor?*

W. Moerkens *Defence date: Dec 2017*
Graduation project, M.Sc. in Industrial and Applied Mathematics *M&CS, TU/e*
Thesis title: *The Effects of Engagement on Financial Performance*

Y. Raaijmakers *Defence date: Sep 2017*
Graduation project, M.Sc. in Industrial and Applied Mathematics *M&CS, TU/e*
Thesis title: *What Are Feasible Stress Scenarios and What Is Their Impact on Pension Fund Portfolios?*

C. Suijkerbuijk *Defence date: Jul 2017*
Internship and graduation project, M.Sc. in Industrial and Applied Mathematics *M&CS, TU/e*
Thesis title: *Integration of Preventive Maintenance and Inventory Management for Healthcare Systems*

Y.J. Buijs *Defence date: Feb 2017*
Internship and graduation project, M.Sc. in Industrial and Applied Mathematics *M&CS, TU/e*
Thesis title: *Integration of Smart Maintenance and Spare Part Logistics for Healthcare Systems*

Y. Ma *Defence date: Oct 2016*
Internship and graduation project, M.Sc. in Industrial and Applied Mathematics *M&CS, TU/e*
Thesis title: *Modelling the Filament Condition for Failure Prediction of a Filament in an X-ray Tube*

M. Penders *Defence date: Mar 2016*
Graduation project, M.Sc. in Operations Management and Logistics *M&CS, TU/e*
Thesis title: *Monitoring assumption validity based on field observations of corrective replacements*

S. Guzik *Defence date: Jan 2014*
Graduation project, M.Sc. in Operations management and Logistics *IE&IS, TU/e*
Thesis title: *Determination of the Optimal Inspection Interval for Pressure Relief Valves Based on the R_p Ratio*

L.P.M. Nijstad *Defence date: Jun 2014*
Graduation project, M.Sc. Industrial Engineering & Management *University of Groningen*
Thesis title: *Plant Wide Inventory Control Strategy for Highly Volatile Industries*

B.Sc. student supervision

M. Gösgens *Defence date: Jan 2018*
Final Bachelor Project, B.Sc. Mathematics *M&CS, TU/e*
Thesis title: *Dynamically Adaptive Age-Based Maintenance Policies*

T.A. Kenbeek *Defence date: Jun 2016*
Final Bachelor Project, B.Sc. Mathematics *M&CS, TU/e*
Thesis title: *Condition based prognosis and diagnosis for wind turbines*

International or national honours and awards

2017	Best M.Sc. thesis on the topic of maintenance: C. Suijkerbuijk (M.Sc.), World Class Maintenance (WCL)
2016	Best B.Sc. or M.Sc. thesis on the topic of service logistics: T.A. Kenbeek (B.Sc.), Service Logistics Forum (SLF)
2006 – 2009	Award for excellence (1st place) in the field of Operational Research, Greek State Scholarships Foundation

Valorisation

Industrial research projects

Project title: *Stress Scenarios and Their Impact on Pension Fund Portfolios* *Project period: Jan 2017 – Jul 2017*
Industrial partners: AON Hewitt
M.Sc. student involved: Y. Raaijmakers
Deliverables: Report

Project title: *Effects of ESG on Sustainability and Stock Returns* *Project period: Dec 2016 – Jul 2017*
Industrial partners: Robeco
M.Sc. student involved: W. Moerkens
Deliverables: Report

Project title: *Preventive Maintenance for Healthcare Systems* *Project period: Sep 2016 – Jul 2017*
Industrial partners: Philips Healthcare
M.Sc. students involved: Y.J. Buijs and C. Suijkerbuijk
Deliverables: Report and tool

Project title: ***Prognostics and Diagnostics of Vibration Signals of Wind Turbines*** *Project period: May 2016 – Dec 2016*

Industrial partners: Eneco

Deliverable: Report

Project title: ***Data-driven Monitoring and Prognostics of Wind Turbines*** *Project period: Sep 2015 – Jun 2016*

Industrial partners: Daisy4offshore consortium

B.Sc. student involved: T.A. Kenbeek
Deliverables: Report and tool

Project title: ***Data Monitoring, Fault Detection and Diagnostics*** *Project period: Aug 2013 – Aug 2014*

Industrial partners: Oliveira, Delta Infra B.V., EyeWings, Blix

Deliverable: Report

Project title: ***Out-of-control Action Plan (OCAP)*** *Project period: Aug 2013 – Aug 2014*

Industrial partners: Oliveira, Delta Infra B.V., EyeWings, Blix

Deliverable: Report

Project title: ***Estimation of the Time to Failure*** *Project period: Aug 2013 – Aug 2014*

Industrial partners: Oliveira, Delta Infra B.V., EyeWings, Blix

Deliverable: Report

Project title: ***Estimation of the Initial State of a Wind Turbine*** *Project period: Aug 2013 – Aug 2014*

Industrial partners: Oliveira, Delta Infra B.V., EyeWings, Blix

Deliverable: Report

Research talks

Invited talks

1. Data-driven decision making under uncertainty, Stochastic Networks, Edinburgh, 2018.
2. Information and value in big data for maintenance, Big Data: Mathematics in Action – 4TU-AMI, Utrecht, 2017.
3. Big data: Predictive maintenance, Smart Maintenance Congress – Microcentrum & WCM, 2017.
4. Performance analysis for random time limited polling models, Israeli – Dutch Workshop on Applied Probability and Queues, Eurandom, 2017.
5. Exact performance analysis under generalised join the shortest queue routings, NETWORKS 2017: Scientific Conference (Track 3: Communication networks), CWI, 2017.
6. Modelling and analysis of maintenance decision policies, 19th INFORMS Applied Probability Society Conference, 2017.
7. Information and value in big data for maintenance, Trends in Maintenance 2017 – Stork, 2017.
8. Big data: From theory to practice - a maintenance application on wind turbines, NAP Studium Generale, 2016.
9. Matrix geometric approach for random walks in the quadrant, Workshop in honour of Wolfgang Stadje, Germany, 2016.
10. Exact and approximate performance analysis for heterogeneous servers under generalised join the shorter queue routings, Queueing Colloquium, CWI, 2016.
11. The mathematics behind the performance of wind turbines, The mathematics of future energy systems, CWI, 2016.
12. Stochastic analysis and optimisation of optical access networks, 18th INFORMS Applied Probability Society Conference, 2015.
13. CBM scheduling based on SPC treating false triggered alarms, IWAP & StochMod, 2014.
14. How to pick the better line, IWAP & StochMod, 2014.
15. Stationary analysis of the shorter queue model, 17th INFORMS Applied Probability Society Conference, 2013.

16. Analytic approaches of multi-dimensional queueing systems, University of Melbourne, Department of Mathematics and Statistics, 2013.
17. Analytic approaches of multi-dimensional queueing systems, University of Queensland, Department of Mathematics and Physics, 2013.
18. Random walks in the quarter plane, Eindhoven University of Technology, Eurandom, The Netherlands, 2011.
19. Queueing systems with synchronised events and possible applications in actuarial science, University of the Aegean, Department of Statistics and Actuarial-Financial Mathematics, Greece, 2011.
20. Markov chains with binomial transitions: modelling and analysis of queueing systems with synchronised events, Universidad Carlos III de Madrid, Department of Statistics, Spain, 2010.
21. Modelling, analysis and pricing of queueing systems, National Technical University of Athens, School of Applied Mathematical and Physical Sciences, Greece, 2010.
22. Queueing systems with synchronised events, University of Ioannina, Department of Mathematics, Greece, 2010.
23. Markov chains with binomial transitions: modelling and analysis of queueing systems with synchronised events, University of the Aegean, Department of Statistics and Actuarial-Financial Mathematics, Greece, 2010.
24. A single server queue with synchronised abandonments, University of Athens, Department of Mathematics, Greece, 2009.

Selected abstracts /Conference presentations

25. The mathematics behind the performance of wind turbines, AP@Rock 2017.
26. The statistics behind the performance of wind turbines, Computational sciences future energy systems conference, Utrecht, 2016.
27. A matrix geometric approach for random walks, 2nd European Queueing Conference, 2016.
28. Condition-based maintenance at both scheduled and unscheduled opportunities, 9th IMA International Conference on Modelling in Industrial Maintenance and Reliability (MIMAR), 2016.
29. Matrix geometric approach for random walks in the quadrant, 9th International Conference on Matrix-Analytic Methods in Stochastic Models, 2016.
30. Scheduling preventive maintenance on a wind turbine based on quantitative data, 17th INFORMS Applied Probability Society Conference, 2015.
31. Stochastic analysis and optimisation of optical access networks, 17th INFORMS Applied Probability Society Conference, 2015.
32. Factorial moment approach for the study of the infinite server queue with synchronised reneging, 17th INFORMS Applied Probability Society Conference, 2013.
33. Queueing models with linear and binomial transitions, 9th International Workshop on Retrial Queues, 2012.
34. Erlang arrivals joining the shortest queue-Stretching the limits of the compensation approach, 4th EURO Working Group on Stochastic Modelling Conference, 2012.
35. The compensation approach: studying the Erlang arrivals joining the shortest queue, Workshop on Scaling limits of random walks in the quarter plane, 2012.
36. Equilibrium balking strategies in a single server Markovian queue with server vacations and impatient customers, 16th INFORMS Applied Probability Society Conference, 2011.
37. Synchronised services in a single server gated queue, 9th German Open Conference on Probability and Statistics, 2010.
38. Continuous-time Markov Chains with Binomial Transitions: Modelling, Analysis and Applications to Queueing Systems with Synchronised Events, 3rd EURO Working Group on Stochastic Modelling Conference, 2010.
39. A single server queue with synchronised abandonments, 3rd Madrid Conference on Queueing theory, 2010.
40. Markov Chains with Binomial Transitions: Modelling and Analysis of Queueing Systems with Synchronised Events, 15th INFORMS Applied Probability Society Conference, 2009.

41. Synchronised reneging in queueing systems with vacations, 2nd EURO Working Group on Stochastic Modelling Conference, 2008.
42. Synchronised reneging in a queueing system with constant retrials, 7th International Workshop on Retrial Queues, 2008.
43. Performance evaluation and pricing of a queueing system with synchronised services and setup times, 12th International Conference on Applied Stochastic Models and Data Analysis (AMSDA), 2007.
44. Analysis of a queueing system with synchronised services and setup times, 14th INFORMS Applied Probability Conference, 2007.

Department seminars (invited)

45. Decision making under uncertainty, Korteweg-De Vries Instituut voor Wiskunde (KdVI), 2018.
46. Matrix geometric approaches for random walks in the quadrant, University of Queensland, 2017.
47. The mathematics behind the performance of wind turbines, University of Queensland, 2017.
48. Matrix geometric approaches for random walks in the quadrant, University of Melbourne, 2017.
49. The mathematics behind the performance of wind turbines, University of Melbourne, 2017.
50. Scheduling preventive maintenance on a wind turbine based on quantitative data, Eindhoven University of Technology, 2015.
51. Performance approximation of computer networks and server farms, Utrecht University, 2014.
52. Shortest queue polling model, Eindhoven University of Technology, 2012.
53. Queueing models with linear and binomial transitions, Eindhoven University of Technology, 2011.
54. Basic hyper-geometric series, University of Athens, 2008.
55. To queue or not to queue, University of Athens, 2006.
56. Difference and differential equations in Stochastic Operations Research, University of Athens, 2005.

Visits

P.G. Taylor — *Apr 2017*
Funding: Networks and the University of Melbourne — *University of Melbourne*

Y. Nazarathy, T. Taimre, and P. Pollett — *Apr 2017*
Funding: Networks and the University of Queensland — *University of Queensland*

Z. Palmowski — *Oct 2016*
Funding: Wroclaw University — *Wroclaw University*

Z. Palmowski — *Sep 2015*
Funding: Wroclaw University — *Wroclaw University*

S. Kanta — *Apr 2010*
Funding: Universidad Carlos III de Madrid — *Universidad Carlos III de Madrid*

G. Latouche — *Jul 2009*
Funding: Université Libre de Bruxelles — *Université Libre de Bruxelles*

Teaching

Teaching experience

Department of Mathematics and Computer Science, Eindhoven University of Technology

Lecturer (Coordinating & developing course):

TU/e courses:

2017 – 2018 Financial Mathematics (2DF40, B.Sc.)
2017 – 2018 Stochastic Operations Research (2DI60, (pre)M.Sc.)
Evaluation lecturer 4.7/5
Overall course evaluation 8/10
2016 – 2017 Stochastic Operations Research (2DI60, (pre)M.Sc.)
Evaluation lecturer 4.7/5
Overall course evaluation 8.5/10
2016 – 2017 Financial Mathematics (2DF40, B.Sc.)
Evaluation lecturer 4.8/5
Overall course evaluation 7.8/10
2015 – 2016 Stochastic Operations Research (2DI60, (pre)M.Sc.)
Evaluation lecturer 4.5/5
Overall course evaluation 8.5/10
2015 – 2016 Financial Mathematics (2DF40, B.Sc.)
Evaluation lecturer 3.8/5
Overall course evaluation 7.2/10
2014 – 2015 Stochastic Operations Research (2DI60, (pre)M.Sc.)
Evaluation lecturer 4.8/5
Overall course evaluation 8.1/10
2014 – 2015 Financial Mathematics (2DF40, B.Sc.)
Evaluation lecturer 4.2/5
Overall course evaluation 7.6/10
2012 – 2013 Pre-master Statistics (2DD21)
2012 – 2013 Statistics A (2DL07, B.Sc.)
2011 – 2013 Seminar en Minorproject (supervision of group projects, B.Sc.)
2011 – 2012 Pre-master Stochastic Operations Research (2DD20 with M. Vlasiou)

National courses:

2016 – 2017 LNMB PhD course: Algorithmic Methods in Queueing Theory (with A. Al Hanbali)
2014 – 2015 MasterMath course: Introduction to Stochastic Processes (with J.A.C. Resing)
2012 – 2013 MasterMath course: Introduction to Stochastic Processes (with J.A.C. Resing)

Faculty of Economics and Business, Division of Operations, University of Groningen

Lecturer (Coordinating & developing course):

2013 – 2014 Mathematics for Pre-M.Sc. (454 enrolled students)
2013 – 2014 Statistical Modelling for EOR

Teaching Assistant:

2013 – 2014 Matrices, Graphs and Convexity
2013 – 2014 Introduction to OR
2013 – 2014 Linear Models in Statistics

Department of Statistics and Actuarial - Financial Mathematics, University of the Aegean

Lecturer (Coordinating & developing course):

2010 – 2011 Introduction to Probability Theory and Combinatorics (B.Sc.)
2010 – 2011 Probability Theory II (B.Sc.)
2010 – 2011 Stochastic Processes I (B.Sc.)
2010 – 2011 Stochastic Processes II (B.Sc.)
2009 – 2010 Probability Theory II (B.Sc.)
2009 – 2010 Stochastic Processes I (B.Sc.)
2009 – 2010 Stochastic Processes II (B.Sc.)
2009 – 2010 Risk Theory II (B.Sc.)
2009 – 2010 Decision and Game Theory (B.Sc.)

Department of Mathematics, University of Athens

Lecturer (Coordinating & developing course):

2004 – 2009 LaTeX seminars
2004 – 2009 Matlab seminars

Teaching Assistant:

2003 – 2004 Statistics I (B.Sc.)
2004 – 2009 Queueing Theory (B.Sc.)
2005 – 2009 Operations Research (B.Sc.)
2005 – 2009 Stochastic methods in OR (B.Sc.)
2007 – 2009 Stochastic models in OR (M.Sc.)

Institute or school honours and awards

2016 – 2017 Nominated for the "Best Teacher Award" in CS by GEWIS, Eindhoven University of Technology
2016 – 2017 Excellent course evaluation, course 2DI60, Eindhoven University of Technology
2016 – 2017 Excellent course evaluation, course 2DF40, Eindhoven University of Technology
2015 – 2016 Excellent course evaluation, course 2DI60, Eindhoven University of Technology
2015 – 2016 Excellent course evaluation, course 2DF40, Eindhoven University of Technology
2013 – 2014 Nominated for the teaching award award "FEB Newcomer of the year", Groningen University
2009 – 2010 Award for excellence in teaching, Department of Statistics and Actuarial – Financial Mathematics, University of the Aegean

Teaching qualifications

2017 University Teaching Qualification (UTQ / BKO) diploma, Eindhoven University of Technology

Organisation

Public and community service

2017 – Present Core team member of the 4TU Resilience Engineering Center, 4TU.Federation

Institute contributions

2016 – Present Core team member of DSC/e, Research Program Smart Manufacturing and Maintenance
2012 – Present TU/e and Math & CS Ambassador, Eindhoven University of Technology
2011 – Present Organisation of the Stochastics Seminar, Eindhoven University of Technology
2003 – 2008 Representative of graduate student's body to the General Assembly, University of Athens
2004 – 2007 President of the Student's Association, Department of Mathematics, University of Athens
2007 – 2008 Vice-President of the Student's Association, Department of Mathematics, University of Athens
2003 – 2004 Vice-President of the Student's Association, Department of Mathematics, University of Athens

Professional service

Editorial board memberships

2015 – Present Editor for the journal of Probability Engineering and Information Sciences, Cambridge University Press
2014 – Present Guest editor for the journal of Annals of Operation Research journal, Springer Science+Business Media

Technical program committees

2014 – Present Program committee member of the Rutgers Applied Probability Conference, Rutgers
2013 – Present Program committee member of the Applied Probability Society Conference, INFORMS

Organisation of workshops and conferences

2018 Multidimensional Queues, Risk, and Finance, Eurandom
2018 Organisation of the Study Group Mathematics with the Industry, Eindhoven University of Technology
2017 Organisation of the Study Group Mathematics with the Industry, University of Amsterdam & CWI
2016 Organisation of the Data-Driven Operations Management workshop, Eurandom
2012 Organisation of the 6th Young European Queueing Theorists (YEQT) workshop, Eurandom
2012 Organisation of the 7th Conference in Actuarial Science and Finance, Samos
2010 Organisation of the 3rd EURO Working Group on Stochastic Modelling, Nafplio
2010 Organisation of the 6th Conference in Actuarial Science and Finance, Samos
2008 Organisation of the 7th International Workshop on Retrial Queues, Athens
2008 Part of the local organising committee of the 3rd ValueTools, Athens

Technical journal or conference referee activities

Referee for journals: Annals of Operation Research, Asia-Pacific Journal of Operational Research, Computers and Mathematics with Applications, Computers & Operations Research, European Journal of Operational Research, Journal of Applied Probability, IEEE Systems Journal, Mathematical and Computer Modelling, Naval Research Logistics, Operational Research: An International Journal, Operational Research, OR Spektrum, Performance Evaluation, Probability Engineering and Information Systems, Stochastic Models, Quality Technology & Quantitative Management, Queueing Systems.

Referee for conferences: ValueTools, QTNA – International Conference on Queueing Theory and Network Applications, ASMTA – International Conference on Analytical & Stochastic Modelling Techniques & Applications.

Society offices, activities, and memberships

IEEE – Professional association of the Institute of Electrical and Electronics Engineers (IEEE), Member: 2017 – Present

LNMB – Dutch Network on the Mathematics of Operations Research, Member: 2014 – Present

BETA – Research School for Operations Management and Logistics, Member: 2014 – Present

WISE – Women in Science Eindhoven, Member: 2011 – Present

Electoral Commission for the Hellenic Federation of University Teachers' Associations, 2010

INFORMS – Institute for Operations Research and Management Science. Member: 2006 – Present

Other professional activities

Development

2015 – 2016 Attendance of training course "Academic Leadership for Assistant Professors", Eva Wiltingh B.V.

Technical skills

Programming:	Mathematica (proficient), Matlab (proficient), R (proficient), SPSS (intermediate)
OS:	Macintosh (proficient), Windows (proficient)
Technical writing:	grant/funding applications (expert), papers (expert), technical reports (expert), texbooks (expert)

Language skills

English (fluent)	Certificate of Proficiency in English (C1 & C2), University of Cambridge
French (fluent)	Diplome approfondi de langue Francaise (DALF C1 & C2)
	Diplome d'etudes en langue Francaise (DELF A1 & A2, B1 & B2)
Dutch (good command)	Level-B1
Greek (mother tongue)	

References available upon request