Research output

Complete resource pooling of a load balancing policy for a network of battery swapping stations

Bounds and limit theorems for a layered queueing model in electric vehicle charging

Thematic poster on women in mathematics in the Netherlands
Vlasiou, M. & Kruseman, A., 31 Jul 2018

Queueing networks for electric vehicle charging
Aveklouris, A., Vlasiou, M. & Zwart, B., 2018

Stochastic networks for electric vehicle charging
Aveklouris, A., Vlasiou, M. & Zwart, B., 2018

Heavy-traffic approximations for a layered network with limited resources

A stochastic resource-sharing network for electric vehicle charging

Speed of convergence to the quasi-stationary distribution for Lévy input fluid queues

Electric vehicle charging: A queueing approach

Server waiting times in infinite supply polling systems with preparation times

Asymptotic error bounds for truncated buffer approximations of a 2-node tandem queue

Dynamic server assignment in an extended machine-repair model

Heavy-traffic asymptotics for networks of parallel queues with Markov-modulated service speeds
Markovian polling systems with an application to wireless random-access networks

A Lévy input fluid queue with input and workload regulation

Corrected phase-type approximations for heavy-tailed queueing models in a Markovian environment

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Corrected phase-type approximations of heavy-tailed queueing models in a Markovian environment

Corrected phase-type approximations of heavy-tailed queueing models in a Markovian environment

Insensitivity of proportional fairness in critically loaded bandwidth sharing networks
Vlasiou, M., Zhang, J. & Zwart, B., 2014, s.n.31 p. (arXiv.org; vol. 1411.4841 [math.PR])

Markovian polling systems with an application to wireless random-access networks

On the accuracy of phase-type approximations of heavy-tailed risk models

Analysis of a two-layered network by means of the power-series algorithm

Analytic properties of two-carousel systems

Corrected phase-type approximations for the workload of the MAP/G/1 queue with heavy-tailed service times

Corrected phase-type approximations for the workload of the MAP/G/1 queue with heavy-tailed service times

Corrected phase-type approximations for the workload of the MAP/G/1 queue with heavy-tailed service times
Corrected phase-type approximations of heavy-tailed risk models using perturbation analysis

Cyclic-type polling models with preparation times

Cyclic-type polling models with preparation times

Heavy-traffic asymptotics for networks of parallel queues with Markov-modulated service speeds

Marginal queue length approximations for a two-layered network with correlated queues

Parallel queueing networks with Markov-modulated service speeds in heavy traffic

Server waiting times in infinite supply polling systems with preparation times

Analysis of a two-layered network with correlated queues by means of the power-series algorithm

Dynamic server assignment in an extended machine-repair model

On the accuracy of phase-type approximations of heavy-tailed risk models

Separation of timescales in a two-layered network

A Lévy input fluid queue with input and workload regulation

A Lévy input model with additional state-dependent services

Analytic properties of two-carousel systems

Marginal queue length approximations for a two-layered network with correlated queues
Regenerative processes

Renewal processes with costs and rewards

Separation of timescales in a two-layered network

Tail asymptotics for a random sign Lindley recursion

A survey on performance analysis of warehouse carousel systems
Litvak, N. & Vlasiou, M., 2010, In : Statistica Neerlandica. 64, p. 401-447

A Lévy input model with additional state-dependent services

A survey on performance analysis of warehouse carousel systems

A two-station queue with dependent preparation and service times

Large deviations for a random sign Lindley recursion

A course on queueing models (Book review)

A survey on performance analysis of warehouse carousel systems
Litvak, N. & Vlasiou, M., 2008, Enschede: University of Twente. (Memorandum Department of Applied Mathematics; vol. 1864)

Large deviations for a random sign Lindley recursion

M/G/$\infty$ polling systems with random visit times

$M/G/\text{infty}$ polling systems with random visit times

A multi-station queue with dependent interarrival and service times

A non-increasing Lindley-type equation
A two-station queue with dependent preparation and service times

Exact solution to a Lindley-type equation on a bounded support

On queues with service and interarrival times depending on waiting times

Time-dependent behaviour of an alternating service queue

Lindley-type recursions

On queues with service and interarrival times depending on waiting times

A non-increasing Lindley-type equation

An alternating service problem

Exact solution to a Lindley-type equation on a bounded support

Time-dependent behaviour of an alternating service queue

A Lindley-type equation arising from a carousel problem

A Lindley-type equation arising from a carousel problem

An alternating service problem

Throughput analysis of two carousels

Projects

Activities
Simons Institute for the Theory of Computing
Maria Vlasiou (Visiting researcher)
30 Oct 2017 – 31 Dec 2017
Heavy-traffic approximations for a layered network with limited resources
Maria Vlasiou (Speaker)
11 Jul 2017

Lorenz Center (External organisation)
Maria Vlasiou (Member)
4 May 2017 → May 2020

Error bounds and approximations for heavy-tailed stochastic systems
Maria Vlasiou (Speaker)
6 Apr 2017

Australian Mathematical Sciences Institute (AMSI)
Maria Vlasiou (Visiting lecturer)
13 Feb 2017 → 22 Feb 2017

IISE Transactions (Journal)
Maria Vlasiou (Editorial board member)
1 Feb 2017 → …

53th ANZIAM conference (Australia and New Zealand Industrial and Applied Mathematics)
Maria Vlasiou (Participant)
Feb 2017

Error bounds and approximations for heavy-tailed stochastic systems
Maria Vlasiou (Keynote speaker)
Feb 2017

Heavy-traffic limits for layered queuing networks
Maria Vlasiou (Invited speaker)
Feb 2017

conference; INFORMS Annual Meeting
Maria Vlasiou (Member of programme committee)
2017

conference; INFORMS Annual Meeting
Maria Vlasiou (Chair)
2017

conference; INFORMS Annual Meeting
Maria Vlasiou (Participant)
2017

INFORMS Applied Probability Society conference
Maria Vlasiou (Member of programme committee)
2017

INFORMS Applied Probability Society conference
Maria Vlasiou (Chair)
2017
INFORMS Applied Probability Society conference
Maria Vlasiou (Participant)
2017

Layered and interacting queues
Maria Vlasiou (Invited speaker)
2017

Queues on interacting networks
Maria Vlasiou (Speaker)
2017

Maria Vlasiou (Member of programme committee)
11 Feb 2016 → 25 Feb 2017

Mathematical Methods of Operations Research (Journal)
Maria Vlasiou (Editorial board member)
15 Jan 2016 → …

Asymptotic error bounds for truncated buffer approximations of a 2-node tandem queue
Maria Vlasiou (Speaker)
2016

University of Twente (External organisation)
Maria Vlasiou (Member)
2016 → …

Maria Vlasiou (Member of programme committee)
1 Mar 2015 → 25 Feb 2016

Speaker
Maria Vlasiou (Speaker)
1 Jul 2014 → …

Wroclaw University of Science and Technology
Maria Vlasiou (Visiting researcher)
1 Jul 2013 → 21 Jul 2013

Hong Kong University of Science and Technology
Maria Vlasiou (Visiting researcher)
2 Mar 2013 → 31 Mar 2013
3rd International Conference on Operations Research and Enterprise Systems (ICORES 2014), March 6-8, 2014, Angers, France
Maria Vlasiou (Member of programme committee)
1 Mar 2013 → 8 Mar 2014

4th International Conference on Operations Research and Enterprise Systems (ICORES 2015), January 10-12, 2015, Lisbon, Portugal
Maria Vlasiou (Member of programme committee)
1 Mar 2013 → 12 Jan 2015

2nd International Conference on Operations Research and Enterprise Systems (ICORES 2013), February 16-18, 2013, Barcelona, Spain
Maria Vlasiou (Speaker)
16 Feb 2013

Hong Kong University of Science and Technology
Maria Vlasiou (Visiting researcher)
8 Feb 2012 → 9 Mar 2013

Applied and Computational Mathematics (Journal)
Maria Vlasiou (Editorial board member)
2012 → 2014

Academic Leadership for Assistant Professors
Maria Vlasiou (Recipient)
1 Sep 2011 → 15 Jan 2012

Analytic properties of picking strategies in carousels
Maria Vlasiou (Speaker)
May 2011

California Institute of Technology
Maria Vlasiou (Visiting researcher)
1 Mar 2011 → 21 Mar 2011

BETA conference: Operations Management on the move
Maria Vlasiou (Organiser)
2 Nov 2010 → 3 Nov 2010

Tel Aviv University
Maria Vlasiou (Visiting researcher)
19 May 2010 → 5 Jun 2010

Isaac Newton Institute for Mathematical Sciences
Maria Vlasiou (Visiting researcher)
4 May 2010 → 19 May 2010

Wroclaw University of Science and Technology
Maria Vlasiou (Visiting researcher)
16 Apr 2010 → 30 Apr 2010

Isaac Newton Institute for Mathematical Sciences
Maria Vlasiou (Visiting researcher)
1 Mar 2010 → 28 Mar 2010
University Teaching Qualification
Maria Vlasiou (Recipient)
1 Jan 2010

Making Healthcare Processes Work
Maria Vlasiou (Organiser)
1 Oct 2009 → 26 Feb 2010

Columbia University
Maria Vlasiou (Visiting researcher)
4 Jul 2009 → 11 Jul 2009

A Levy input model with additional state-dependent services
Maria Vlasiou (Invited speaker)
17 May 2009

Wroclaw University of Science and Technology
Maria Vlasiou (Visiting researcher)
8 May 2009 → 29 May 2009

Georgia Institute of Technology
Maria Vlasiou (Visiting researcher)
21 Feb 2009 → 2 Mar 2009

Wroclaw University of Science and Technology
Maria Vlasiou (Visiting researcher)
19 Apr 2008 → 25 Jun 2008

Duke University
Maria Vlasiou (Visiting researcher)
20 Feb 2007 → 24 Feb 2007

University of Twente
Maria Vlasiou (Visiting researcher)
26 Sep 2006 → 9 Oct 2006

Indian Statistical Institute
Maria Vlasiou (Visiting researcher)
25 May 2006 → 6 Jun 2006