

8th Stochastic Modelling Meeting (STOCHMOD 2024)

Milan, 5-7 June 2024

Detailed Program (Update: May 2nd, 2024)

From	To	Wed 5th June			Thu 6th June			Fri 7th June		
9:00	9:30	Conference Registration			Markovian Decision Process in Operations Management	Finance and Risk Management	Optimization I	Optimization II	Stochastic Models in Healthcare	
9:30	10:00	Conference Opening and Welcome								
10:00	10:30	Pricing	Stochastic Models in Manufacturing	Strategic Customers in Queuing Systems I	Coffee & Tea Break			Coffee & Tea Break		
10:30	11:00				Artificial Intelligence and Big Data Analytics in Operations and Supply Chain Management I	Stochastic processes	Service Systems Management	Keynote Session Prof. Ger Koole		
11:00	11:30							Conference Closure		
11:30	12:00	Lunch			Lunch			Light Lunch		
12:00	12:30	Keynote Session Prof. Kannan Govindan			Lunch					
12:30	13:00									
13:00	13:30	Strategic Customers in Queuing Systems II	Transportation Management	Queueing Networks I	Keynote Session Prof. Michael Grieves					
13:30	14:00									
14:00	14:30									
14:30	15:00									
15:00	15:30				Smart warehouses	Stochastic models		LAB TOUR		
15:30	16:00				Coffee & Tea Break					
16:00	16:30				Coffee & Tea Break					
16:30	17:00	Inventory management	Queueing Networks II		Queueing Networks III	Artificial Intelligence and Big Data Analytics in Operations and Supply Chain Management II				
17:00	17:30									
17:30	18:00	LAB TOUR								
18:00	18:30									
18:30	19:00									
19:00	19:30									
20:00	-				SOCIAL DINNER					

Wed 5th June		
<i>Time</i>	<i>Description</i>	<i>Location</i>
9:00 - 09:30	Conference Registration	Hall
09:30 - 10:00	Conference Opening and Welcome	Aula Magna Carassa e Dadda
10:00 - 12:00	Parallel Technical Sessions	
10:00 - 11:40	Pricing	Room1
10:00 - 10:20	Title: Pigouvian taxation for socially responsible queueing in Naor's model; Authors: Benjamin Legros and Johan van Leeuwen	
10:20 - 10:40	Title: Learning and pricing in queues with unobserved balking; Authors: Shreehari Bodas, Michel Mandjes and Liron Ravner	
10:40 - 11:00	Title: Optimal Pricing with Generalized Run-Out Rate Policies; Authors: Tarek Abdallah and Josh Reed	
11:00 - 11:20	Title: Dynamic Pricing with Finite Price Sets via Upper Confidence Bounds; Authors: Thanos Avramidis	
11:20 - 11:40	Title: Job pricing with online platforms; Authors: Kaiyue Yang, Oualid Jouini and Benjamin Legros	
10:00 - 11:40	Stochastic Models in Manufacturing	Room2
10:00 - 10:20	Title: Optimal Capacity Allocation to an Automotive OEM Facing Service-dependent Demand and Market Exit Risk; Authors: Govind Kumawat, Debjit Roy and Felix Papier	
10:20 - 10:40	Title: Exploring the Benefits of Dynamic Scheduling in Complex Manufacturing Settings; Authors: Jan-Niklas Dörr, Alexander Pahr and Martin Grunow	
10:40 - 11:00	Title: Robust Energy-aware Scheduling of Jobs on Parallel Batch Processing Machines; Authors: Jens Rocholl and Lars Moench	
11:00 - 11:20	Title: Dynamic dispatching and batching in the diffusion work area of semiconductor manufacturing systems; Authors: Roberto Rosario Corsini, Antonio Costa, Giuseppe Oriti, Daniele Vinciguerra, Marco Stefano Scroppo and Daniele Pagano	
11:20 - 11:40	Title: A Simulation-Based Cut Generation Method for Integer Resource Allocation in Production Networks; Authors: Andrea Matta, Menghyi Zhang and Arianna Alfieri	
10:00 - 12:00	Strategic Customers in Queuing Systems I	Room3
10:00 - 10:20	Title: On Strategic Customers in the Group-Merging Israeli Queue; Authors: Gabi Hanukov, Efrat Perel and Nir Perel	
10:20 - 10:40	Title: Earning from the wait: toll versus advertisement; Authors: Zeynep Aksin, M. Hichame Benbitour, Oualid Jouini, Benjamin Legros, Raik Stolletz and Mohammad Zenouzzadeh	

10:40 - 11:00	Title: The Israeli Queue with a Capacitated Server: Modeling and Approximations; Authors: Nir Perel, Efrat Perel and Mor Kaspi	
11:00 - 11:20	Title: Foresee the Next Line: Customer Strategies and Information Disclosure in Tandem Queues; Authors: Ran Snitkovsky, Ricky Roet Green and Jingwei Ji	
11:20 - 11:40	Title: Strategic renegeing in a Markovian queueing system with server replacement; Authors: Dimitrios Logothetis and Odysseas Kanavetas	
11:40 - 12:00	Title: The effect of server competition on priority purchasing customer behavior; Authors: Binyamin Oz and Elisheva Zur Schwarz	
12:00 - 13:00	Lunch	Catering area
13:00 - 14:00	Keynote Session Prof. Kannan Govindan	Aula Magna Carassa e Dadda
14:00 - 15:30	Parallel Technical Sessions	
14:00 - 15:20	Strategic Customers in Queuing Systems II	Room1
14:00 - 14:20	Title: Queueing systems with strategic customers who receive information about other customers' decisions; Authors: Antonis Economou	
14:20 - 14:40	Title: Strategic Queueing with Deadlines; Authors: Joris Slootweg, Jesse Nagel and Rob van der Mei	
14:40 - 15:00	Title: Queueing Networks with Strategic Customers: Recursive Computation of Equilibrium and Optimal Strategies; Authors: Apostolos Burnetas	
15:00 - 15:20	Title: Heterogeneous Risk-Averse Strategic Customers: Equilibrium Behavior and Pricing; Authors: Hadi Mahmoudzadeh, Athanasia Manou, Fikri Karaesmen and Pelin Gülşah Canbolat	
14:00 - 15:20	Transportation Management	Room2
14:00 - 14:20	Title: An integrated approach to synchronize transportation and warehousing activities; Authors: Maximiliano Cubillos, Ola Jabali, Elena Tappia and Tea Castellucci	
14:20 - 14:40	Title: Selecting the best carrier for each delivery: a machine learning based approach; Authors: Matteo Mascheroni, Emilio Moretti, Alessandro Del Fabbro, Elena Tappia and Marco Melacini	
14:40 - 15:00	Title: Balancing Effectiveness and Equity for Humanitarian Transshipments under Uncertainty; Authors: Ohad Eisenhandler and Reut Noham	
15:00 - 15:20	Title: Time-Dependent Shipment Options and Shipment Fees for E-Commerce Fulfillment Centers; Authors: Uta Mohring, Melvin Drent, Ivo Adan and Willem van Jaarsveld	
14:00 - 15:20	Queueing Networks I	Room3
14:00 - 14:20	Title: Queues with Service Resetting; Authors: Uri Yechiali, Ofek Lauber-Bonomo and Shlomi Reuveni	

14:20 - 14:40	Title: Impact of retrial distribution in stationary and time-dependent queues; Authors: Ömer Özümerzifon, Benjamin Legros and Raik Stolletz	
14:40 - 15:00	Title: A Strategic Double-Ended Queuing Model for Shared Transportation; Authors: Refael Hassin and Yuval Brief	
15:00 - 15:20	Title: On the Value of Service Age Information; Authors: Yoav Kerner, Ricky Roet-Green and Lin Zang	
15:30 - 16:00	Coffee & Tea Break	Catering area
16:00 - 17:30	Parallel Technical Sessions	
16:00 - 17:20	Inventory Management	Room1
16:00 - 16:20	Title: Fair and Profitable When Serving Different Customer Profiles; Authors: Baris Balcioglu and Sinan Dede	
16:20 - 16:40	Title: Stock-out policies of spare part inventory warehouse for multi-item repairable system; Authors: Yonit Barron and Chananel Benshimol	
16:40 - 17:00	Title: Joint Discount and Replenishment Parametric Policies for Perishable Products.; Authors: Edoardo Fadda, Paolo Brandimarte and Francesca Maggioni	
17:00 - 17:20	Title: Planning with Supply Yield Uncertainty: On the Optimality of Linear Policies; Authors: Riccardo Mogre and Jan A. Van Mieghem	
16:00 - 17:20	Queueing Networks II	Room2
16:00 - 16:20	Title: Quality Versus Quantity in Dynamic Matching with Impatient Agents; Authors: Angela Kohlenberg and Itai Gurvich	
16:20 - 16:40	Title: Finite number of random priority levels; Authors: Moshe Haviv and Binyamin Oz	
16:40 - 17:00	Title: A single-server delay/retrial model with two phases of service and non-preemptive priority for the queued customers; Authors: Rein Nobel and Hylke Muntinghe	
17:00 - 17:20	Title: Dynamic programming for the general stochastic matching model; Authors: Jean Loïc and Pascal Moyal	
17:30 - 19:00	LAB TOUR	

Thu 6th June		
Time	Description	Location
09:00 - 10:30	Parallel Technical Sessions	
09:00 - 10:30	Markovian Decision Process in Operations Management	Room1
09:00 - 09:20	Title: Scheduling of Firm-Initiated Field Appointments with Customer Choice; Authors: Yanlu Zhao and Felix Papier	
09:20 - 09:40	Title: A Bi-objective Integrated Design and Dynamic Maintenance Approach to the Redundancy Allocation Problem; Authors: Luke Fairley, Robert Shone, Jefferson Huang and Peter Jacko	
09:40 - 10:00	Title: An MDP Approach to Operate Two-product Circular Manufacturing Systems; Authors: Yunlei Song, Nicla Frigerio, Oktay Karabag and Baris Tan	
10:00 - 10:20	Title: Optimal service control under controller vacations: the supermarket manager model.; Authors: Camiel Koopmans, Odysseas Kanavetas and Floske Spieksma	
09:00 - 10:30	Finance and Risk Management	Room2
09:00 - 09:20	Title: A Simulation Analysis for the Role of Counting Distributions in Estimating Extreme Loss Events of Insurance Claims; Authors: Shaul Bar Lev, Ad Ridder and Tomer Shushi	
09:20 - 09:40	Title: 1. Procurement Portfolio Management for Resilient Supply Chains: Value of Information for Risk Averse Decision Making; Authors: Yasemin Merzifonluoglu	
09:40 - 10:00	Title: Optimal adaptive control for Markov Decision Processes (MDP) under side constraints; Authors: Apostolos Burnetas, Odysseas Kanavetas and Michael Katehakis	
10:00 - 10:20	Title: Exploring Copula Methods for Advanced Financial Modelling: A Critical Analysis; Authors: Mohammed Ahnouch and Erwan Lesaout	
09:00 - 10:30	Optimization I	Room3
09:00 - 09:20	Title: Efficient Heuristics to Minimize Total Completion Time with Separate Setup Times; Authors: Harun Aydilek, Ali Allahverdi, Asiye Aydilek and Muberra Allahverdi	
09:20 - 09:40	Title: A New Simheuristic Approach for Stochastic Runway Scheduling; Authors: Rob Shone, Kevin Glazebrook and Konstantinos Zografos	
09:40 - 10:00	Title: Multi-agent Tourist Trip Planning; Authors: Jesse Nagel, Joris Slootweg and Rob van der Mei	

10:00 - 10:20	Title: A bivariate two-moments fit and its application in appointment scheduling; Authors: Bharti Bharti, Rene Bekker and Michel Mandjes	
10:30 - 11:00	Coffee & Tea Break	Catering Area
11:00 - 13:00	Parallel Technical Sessions	
11:00 - 13:00	Artificial Intelligence and Big Data Analytics in Operations and Supply Chain Management I	Room1
11:00 - 11:20	Title: Predictive Reasoning and Generative AI for Optimal Stochastic Control; Authors: Mohsen A Jafari	
11:20 - 11:40	Title: Managing Ameliorating Food Inventory Using Deep Reinforcement Learning; Authors: Alexander Pahr and Martin Grunow	
11:40 - 12:00	Title: Data-Driven Optimization for Some Single Stage Decision Making Problems under Uncertainty; Authors: Bijan Bibak and Fikri Karaesmen	
12:00 - 12:20	Title: Real-Time Optimization of Microgrids Using TD3 and Deep Reinforcement Learning: Southeast Asia; Authors: Yara Jubran and Romain Migne	
12:20 - 12:40	Title: Pricing, Customer Admission and Driver Repositioning in Ride-Hailing Networks: A Deep Reinforcement Learning Approach; Authors: Thomas De Munck, Jean-Sébastien Tancrez and Philippe Chevalier	
11:00 - 13:00	Stochastic processes	Room2
11:00 - 11:20	Title: Simulation Optimization of Reflected Brownian Motion; Authors: Harsha Honnappa, Raghu Pasupathy and Zihe Zhou	
11:20 - 11:40	Title: Emergence of scale-free cascading failures: Generalized approach across all simple, connected graphs; Authors: Agnieszka Janicka, Fiona Sloothaak and Maria Vlasiou	
11:40 - 12:00	Title: A First-Order Gradient Approach for the Connectivity Analysis of Weighted Graphs; Authors: Christian Franssen, Alessandro Zocca and Bernd Heidergott	
12:00 - 12:20	Title: Generic Measures for Quantifying the Dependency between Random Variables; Authors: Rob van der Mei, Guus Berkelmans, Joris Pries and Sandjai Bhulai	
12:20 - 12:40	Title: Estimation of on- and off-time distributions in a dynamic Erdős–Rényi random graph; Authors: Jiesen Wang and Michel Mandjes	
11:00 - 13:00	Service Systems Management	Room3
11:00 - 11:20	Title: A Unified Fluid Model for Large Service Systems with Dependence; Authors: Deniz Simsek, Achal Bassamboo, Ohad Perry and Chenguang Wu	

11:20 - 11:40	Title: Co-exposure management in service systems; Authors: Binyamin Oz and Yael Perlman	
11:40 - 12:00	Title: Staffing queuing systems with finite population and deadlines; Authors: Justus Arne Schwarz and Maximilian Kunz	
12:00 - 12:20	Title: Multitasking Service Systems with Many Servers; Authors: René Bekker, Jaap Storm and Wouter Berkelmans	
12:20 - 12:40	Title: Capacity Allocation and Scheduling in Two-Stage Service Systems with Multi-Class Customers; Authors: Zhiheng Zhong, Ping Cao, Junfei Huang and Sean Zhou	
12:40 - 14:00	Lunch	Catering Area
14:00 - 15:00	Keynote Session Prof. Micheal Grieves	Aula Magna Carassa e Dadda
15:00 - 16:00	Parallel Technical Sessions	
15:00 - 16:00	Smart warehouses	Room1
15:00 - 15:20	Title: Case Study on Efficient Material Handling System Through Task Assignment Based on the Health Status of OHT and AMR; Authors: Young Jae Jang and Tae Hoon Kim	
15:20 - 15:40	Title: Swarm or System-directed? Analysis of Human-Robot Matching Policies in Collaborative Order Pick Systems; Authors: Mahdi Ghorashi Khalilabadi, Debjit Roy and Rene de Koster	
15:40 - 16:00	Title: Maximizing the throughput capacity of mixed load multi-deep robotic storage and retrieval systems; Authors: Timo Lehmann and René De Koster	
15:00 - 16:00	Stochastic models	Room2
15:00 - 15:20	Title: Stochastic Modeling of Online Order Fulfillment using Queueing Systems; Authors: Zeynep Gokce Islier and Onur Safran	
15:20 - 15:40	Title: Exact measures for quantifying the potential transmission of an epidemic process: A stochastic approach considering imperfect vaccines in an SVIR model; Authors: Maria Gamboa, María Jesús Lopez Herrero and Martin Lopez Garcia	
15:40 - 16:00	Title: Optimal Location of Rabies Vaccination Sites Incorporating Queueing Effects; Authors: Maria Rieders, Sherrie Xie, Ricardo Castillo-Neyra, Bhaswar B. Bhattacharya and Michael Z. Levy	
16:00 - 16:30	Coffee & Tea Break	Catering area
16:30 - 17:30	Parallel Technical Sessions	
16:30 - 17:30	Queueing Networks III	Room1

16:30 - 16:50	Title: On Designing a Fire Emergency Vehicle Fleet; Authors: Yossi Luzon, Opher Baron, Vedat Verter and Oded Berman	
16:50 - 17:10	Title: Two moment approximation of multi-server queues with bulk arrivals and batch service; Authors: Horst Zisgen	
17:10 - 17:30	Title: Consistent delay estimation for queues with arrival rate uncertainty; Authors: Liron Ravner and Binyamin Oz	
16:30 - 17:30	Artificial Intelligence and Big Data Analytics in Operations and Supply Chain Management II	Room2
16:30 - 16:50	Title: Time series forecasting using Large Language Models; Authors: Sandjai Bhulai and Elena Garlati	
16:50 - 17:10	Title: Empowering Digital Twin with Artificial Intelligence; Authors: Mohammad Dehghani	
17:10 - 17:30	Title: Automated Generation of Digital Models for Production Systems through State Reconstruction and Event Inference; Authors: Lulai Zhu, Giovanni Lugaresi and Andrea Matta	
20:00	SOCIAL DINNER	

Fri 7th June		
Time	Description	Location
09:00 - 10:30	Parallel Technical Sessions	
09:00 - 10:30	Optimization II	Room1
09:00 - 09:20	Title: Sequential policies and the distribution of their total rewards in dynamic and stochastic knapsack problems; Authors: Alessandro Arlotto, Yun-Tung Kuo and Xinchang Xie	
09:20 - 09:40	Title: Exploring gradient ascent approaches to ranking and selection problems; Authors: Joost Berkhout	
09:40 - 10:00	Title: Data-Driven Distributionally Robust Chance-Constrained Linear Matrix Inequalities; Authors: Fengjie Liang, Jianqiang Cheng and Kai Pan	
10:00 - 10:20	Title: Pooled Testing with Congestion; Authors: Oualid Jouini	
09:00 - 10:30	Stochastic Models in Healthcare	Room2
09:00 - 09:20	Title: Using simulated machine learning to evaluate robust decision-making policies: an application to hospital staff rostering; Authors: Martina Doneda, Pieter Smet, Giuliana Carello, Ettore Lanzarone and Greet Vanden Berghe	
09:20 - 09:40	Title: Allocation of Persons to Mental Health Homes by Knapsack-Based Routing; Authors: Rebekka Arntzen, René Bekker and Rob van der Mei	
09:40 - 10:00	Title: Advance Scheduling for Chronic Care Under Online or Offline Revisit Uncertainty; Authors: Xiaoxiao Shen, Shichang Du, Yan-Ning Sun, Poly Z. H. Sun, Rob Law and Edmond Q. Wu	
10:00 - 10:20	Title: Are No-Shows All That Bad? Strategic Double-Booking and When to Intervene; Authors: Opher Baron, Olga Bountali, Arseniy Gorbushin and Binyamin Oz	
10:30 - 11:00	Coffee & Tea Break	Catering Area
11:00 - 12:00	Keynote Session Prof. Ger Koole	Aula Magna Carassa e Dadda
12:00 - 12:30	Conference Closure	Aula Magna Carassa e Dadda
12:30 - 13:30	Light Lunch	Catering Area
14:30 - 18:00	VISIT IN MILAN	