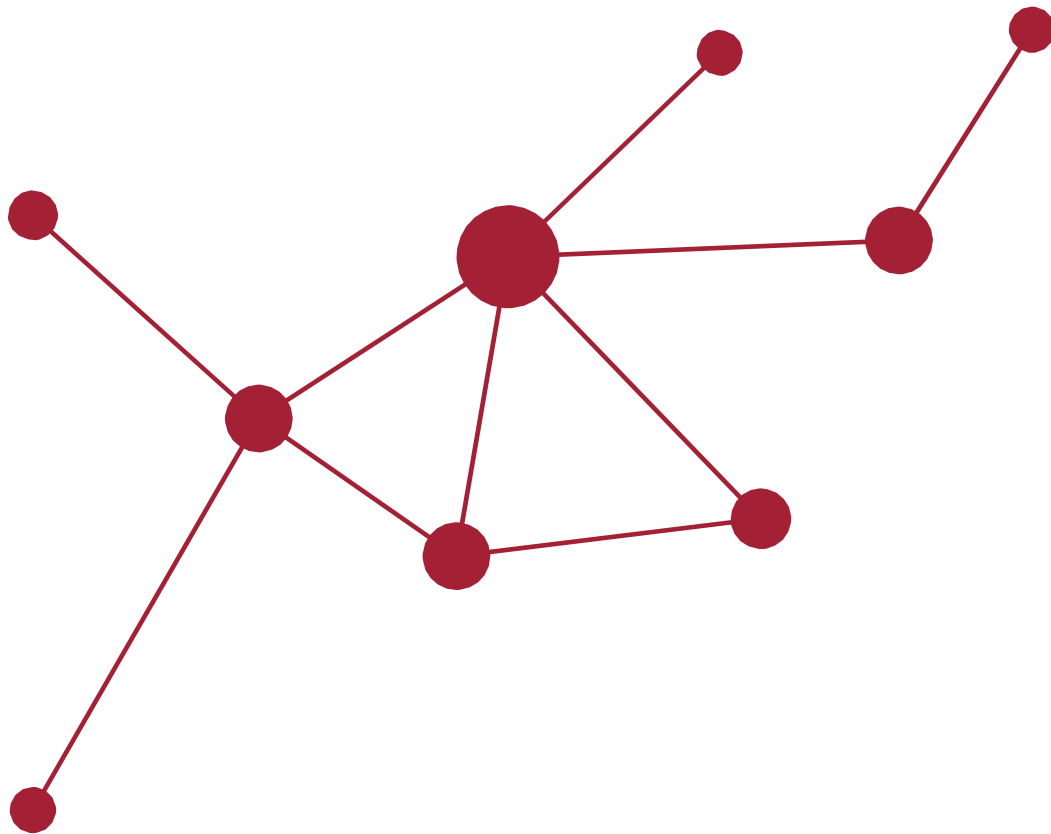




PhD SUMMER ACADEMY 2019



June, 10-21. 2019

ZLC (Zaragoza Logistics Center). Zaragoza, Spain

WELCOME TO THE PhD SUMMER ACADEMY 2019!

It is with great pleasure that we invite you to attend the PhD Summer Academy 2019 at the Zaragoza Logistics Center for an intense period of learning, debating, and discovering the fundamental concepts and recent trends in supply chain management, in addition to meeting your future colleagues and having a great time in Zaragoza, Spain. Hundreds of PhD students have stopped by to benefit of the chance to meet world renown experts and participate to an enriching atmosphere of mutual exchange.

We are happy to announce that we have successfully involved a group of leading scholars from prestigious institutions. Their track record speaks for itself. Hence, in addition to being introduced to methods and topics in the field by absolutely excellent professors, the PhD Summer Academy is a great opportunity to meet doctoral students from different institutions and exchange ideas. Although we expect applicants to come from varied institutions, countries and backgrounds, one thing you all have in common is excellence. You will be selected to be part of a discussion forum of outstanding scholars in the area of supply chain management.

Apply for admission! We are looking forward to meeting and working with you, and to helping you during your stay in Zaragoza. We hope that you are as excited as we are here in Spain to get this Knowledge Exchange journey started!



Gültekin Kuyzu, PhD
PhD Summer Academy Program Director
Zaragoza Logistics Center



Susana Val, PhD
Director
Zaragoza Logistics Center

INDEX

WELCOME (2)

CALENDAR (4)

INSTRUCTOR BIOGRAPHIES (5)

- JAN FRANSOO
- ELENA KATOK
- STEFAN NICKEL
- BERIL TOKTAY

PROGRAM DESCRIPTION (9)

- OPERATIONS AND LOGISTICS IN FRAGMENTED GROCERY RETAIL
- BEHAVIORAL OPERATIONS MANAGEMENT
- HEALTH CARE LOGISTICS
- CIRCULAR ECONOMY MODELS AND APPLICATIONS

CERTIFICATE (11)

CALENDAR

The aim of the summer academy school is to create a strong knowledge discussion forum to boost research results and advances in supply chain management.
Get ready for intense sessions of studies and research!

JUNE					
	Monday 10	Tuesday 11	Wednesday 12	Thursday 13	Friday 14
09:15 09:45	Registration and Welcome coffee				
09:15 12:15			Prof. Stefan Nickel	Prof. Stefan Nickel	Prof. Stefan Nickel
13:15 16:15		Prof. Beril Toktay	Prof. Beril Toktay	Research seminar	Prof. Beril Toktay
19.00 20.30	Zaragoza tour				

JUNE					
	Monday 17	Tuesday 18	Wednesday 19	Thursday 20	Friday 21
09.15 12.15		Prof. Jan Fransoo	Prof. Jan Fransoo	Research seminar	Prof. Jan Fransoo
13:15 16:15	Prof. Elena Katok	Prof. Elena Katok	Research seminar	Prof. Elena Katok	Certificate Ceremony

PROFESSOR	UNIVERSITY	COURSE	HOURS
Jan Fransoo	Kuehne Logistics University	Operations and Logistics in Fragmented Grocery Retail	9
Elena Katok	University of Texas at Dallas	Behavioral Operations Management	9
Stefan Nickel	Karlsruhe Institute of Technology	Health Care Logistics	9
Beril Toktay	Georgia Institute of Technology	Circular Economy Models and Applications	9

INSTRUCTOR BIOGRAPHIES

JAN FRANSOO



Jan Fransoo is Professor of Operations Management & Logistics at Kuehne Logistics University in Hamburg, Germany. He also serves as the University's Dean of Research and Member of the Executive Board. He joined KLU in 2018 following a tenure of 22 years at Eindhoven University of Technology in the Netherlands, where he still holds an honorary professorship in its School of Industrial Engineering.

Fransoo holds a Master of Science degree in Industrial Engineering and a Doctor of Philosophy degree in Operations Management and Logistics, both from Eindhoven University of Technology. Professor Fransoo's research studies operations, logistics, and supply chain management decision making in the retail, chemical, food, pharmaceutical and transport industries.

His current research focuses in particular on retail distribution and channel management in developing markets, on intermodal container transport, and on sustainability and social responsibility in supply chains. His recent books include "Reaching 50 Million Nanostores: Retail Distribution in Emerging Megacities" and "Sustainable Supply Chains: A Research-Based Textbook on Operations and Strategy".

Fransoo has published both modeling and empirical research in over 120 academic journal articles and book chapters, in journals such as Management Science, Operations Research, Production and Operations Management, Manufacturing & Service Operations Management, and Journal of Operations Management. He is Associate Editor of multiple journals, including Operations Research, Production and Operations Management, and Decision Sciences Journal. He frequently engages with companies and governments through research activities and speaking engagements. More details, including a full publication list and his blogposts, can be found on <https://www.janfransoo.com/>.

ELENA KATOK



Dr. Katok is the Ashok and Monica Mago Professor in the Naveen Jindal School of Management and the co-director of the Center and Laboratory for Behavioral Operations and Economics at the University of Texas at Dallas.

Her research focuses on behavioral issues in operations management with the focus on issues related to market design, procurement auctions, supply contract performance, and forecasting systems design. She has worked on projects in several industries including a project with Jeppesen Sanderson, a Boeing subsidiary, for which she was a part of a team that won the Franz Edelman Prize awarded by INFORMS for achievement in the practice of operations research and the management sciences.

Her research has been published in journals such as Management Science, Manufacturing & Service Operations Management, Production and Operations Management, Journal of Operations Management, and Interfaces. She is currently serving as an Associate Editor at Management Science and as a Department Editor at the Production and Operations Management.

Her recent work deals with ways in which computerized optimization algorithms can be used by human decision-makers in a way that combines the ability to optimize with human judgement and insights. Some of the work in this area studied ways in which forecasts developed by expert systems can be effectively communicated to non-expert users.

STEFAN NICKEL



Stefan Nickel is a full professor at the Karlsruhe Institute of Technology - KIT (Germany) and one of the directors of the Institute of Operations Research.

He obtained his PhD in mathematics at the Technical University of Kaiserslautern (Germany) in 1995. From 1995 to 2003 he was assistant and associate professor in mathematics at the Technical University of Kaiserslautern. After a full professor position at the Saarland University (Chair of Operations Research and Logistics) from 2003 to 2009, he joined the Karlsruhe Institute of Technology as the Chair in Discrete Optimization and Logistics in April 2009. Since 2014 he is the dean of the Department of Economics and Management at KIT.

Stefan Nickel was also member of the scientific advisory board as well as of the management board of the Fraunhofer Institute for Applied Mathematics (ITWM) in Kaiserslautern from 2004-2016. Since 2011 he additionally holds the positions of one of the directors of the Karlsruhe Service Research Institute (KSRI) and of the Research Center for Computer Science (FZI). From 2006-2015 he was editor-in-chief of Computers & Operations Research and is still consulting editor. Moreover, he is editor-in-chief of Operations Research for Health Care. He has coordinated the Health Care working group within the German OR society (GOR) and has been the president of GOR from 2013-2014.

Stefan has authored or co-authored 5 books as well as more than 100 scientific articles in his research areas Locational Analysis, Supply Chain Management, Health Care Logistics, and Online Optimization. He has been awarded the EURO prize for the best EJOR review paper (2012) and the Elsevier prize for the EJOR top cited article 2007-2011. In addition he conducted several industry projects with well-known companies such as BASF, Lufthansa, Miele, and SAP.

BERIL TOKTAY



Beril Toktay is Professor of Operations Management, Brady Family Chairholder and ADVANCE Professor.

Her primary research areas are sustainable operations and supply chain management. Professor Toktay's research has been funded by several National Science Foundation grants and has received distinctions such as the 2010 Brady Family Award for Faculty Research Excellence and the MSOM Society's 2015 Management Science Best Paper in Operations Management Award. Professor Toktay served as Associate Editor for M&SOM (2007-2018), POM (2009-2013), and Management Science (2011-2017), and Area Editor (Environment, Energy and Sustainability) for Operations Research (2012-2018). She co-edited the 2013 M&SOM Special Issue on the Environment. She became a Distinguished Fellow of the MSOM Society in 2017.

Dr. Toktay was the President of the MSOM Society and VP of Finance of the POM Society. At Georgia Tech, she serves as the Scheller College of Business ADVANCE Professor, a role that is focused on supporting the advancement of women and underrepresented minorities in academia. She is the founding Faculty Director of the Ray C. Anderson Center for Sustainable Business and the co-architect and Executive Co-Director of Georgia Tech's Serve.Learn.Sustain Quality Enhancement Plan. Professor Toktay currently teaches Business Strategies for Sustainability in MBA and Executive Education programs. She's a recipient of the 2016 Ernest Scheller Jr. Award for Service Excellence and the Georgia Tech 2015 Women of Distinction Award.

PROGRAM DESCRIPTION

OPERATIONS AND LOGISTICS IN FRAGMENTED GROCERY RETAIL

Professor: Jan Fransoo, Kuehne Logistics University, Germany.

Dates: 18, 19, 21 June (to be confirmed)

Course Description

In most developing markets, the dominant grocery retail channel is a dense network of millions of mom-and-pop stores. These nanostores (Fransoo et al., 2017) display interesting operations, logistics, and commercial characteristics that render it into a very relevant field of study, with academic work in this field now rapidly developing. In the developed world, however, we also see an increasing fragmentation of grocery retail, with large hypermarkets under pressure of declining market shares and convenience stores, hard discounters and online grocery services growing fast. Moreover, in the most advanced markets, distinction between the food service market (like restaurants) and the grocery retail market appears to become blurred.

In this course, Professor Fransoo will outline the major characteristics of the nanostores channel, with an emphasis on novel research results from developing markets. In class, we will identify research opportunities in this exciting field, and build on the insights of novel players in developing markets like GoJek and JD.com to understand the operations and logistics implications for the fragmentation in developed markets.

Professor Fransoo will initiate the discussion, but students in the course are expected to actively take part in identifying and understanding underlying trends in grocery retail to develop perspectives on long-term impactful research questions and domains.

BEHAVIORAL OPERATIONS MANAGEMENT

Professor: Elena Katok, University of Texas at Dallas, US

Dates: 18, 19, 20 June (to be confirmed)

Course Description:

Much of the modern research in operations management uses stylized models to gain insights into how production, distribution, and service systems operate. These models typically assume that human decision-makers are fully rational expected-profit maximizers. But real decision-makers sometimes care about goals other than profit maximizations, are subject to behavioral biases, and are not very good at optimization, especially when uncertainty is involved. This course provides an introduction to the area Behavioral Operations Management (BOM).

The goal of BOM is to better understand how human decision makers affect performance or complex systems, identify ways in which human decision-makers systematically deviate from fully rational expected-profit maximizing behavior, and extend our models to account for such systematic deviations. Some of the topics covered include introduction to using laboratory experiments with human subjects in operations, individual decisions, inventory management, and supply chain contracts.

The main goal of the course is to expose students to behavioral research and gain deeper understanding of how to incorporate behavioral regularities into operations models so as to make these models behaviorally robust. The course will use a seminar format. Each session there will be assigned readings that we will discuss and critique as well as hands-on demonstrations of behavioral experiments.

HEALTH CARE LOGISTICS

Professor: Stefan Nickel, Institute of Operations Research, Karlsruhe Institute of Technology, Germany

Dates: 12, 13, 14 June (to be confirmed)

Course Description:

The costs of health care provision are rising in almost every country. Governments react with reforms that incentivize economic behavior of hospitals, e.g., the introduction of the Diagnosis Related Groups (DRG) system in several countries led to the elimination of the principle of cost coverage in favor of the medical, performance-related payment with the threat of deficits. Therefore, targets are to improve quality, transparency, and efficiency of hospital services in a sustainable way. To achieve this, processes have to be analyzed and improved.

Health Care Logistics addresses the efficient planning, realization and control of patient-, material- and information-flow within the healthcare sector. Therefore, the use of Operations Research (OR) methods plays a crucial role. It is important to not only put emphasis upon the economic efficiency but also to take the quality of care and patient satisfaction into account. On the other hand, healthcare logistics should not get involved in (core) medical decisions.

In this course we consider planning problems that arise along the pathway of the patient through the hospital with a focus on appointment planning, patient transportation and operating room scheduling. Models and results also from real world projects will be presented and discussed.

Moreover, the interaction of appropriate logistics concepts with modern OR models allow a patient centered treatment, by respecting the needs of a patient and allowing a smoother process. The digitalization of the health care sector offers additional opportunities.

CIRCULAR ECONOMY MODELS AND APPLICATIONS

Professor: Beril Toktay, Georgia Tech., US.

Dates: 11, 12, 14 June (to be confirmed)

Course Description

A circular economy is an economy in which resource input and waste is minimized through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, recycling, and upcycling. According to Accenture, "Today's business practices will contribute to a global gap of eight billion tons between the supply and demand of natural resources by 2030. This is equal to the total resource usage in North America in 2014 and translates to \$4.5 trillion of lost economic growth by 2030 and as much as \$25 trillion by 2050." Technical feasibility explains only part of this gap; there is a big divergence between what is technically feasible and current practice.

In this course, we will discuss business models for incumbents, platform providers, and third parties to unlock value from the circular economy.

The readings will draw from peer-reviewed articles in the operations and industrial ecology literature, as well as managerial articles from outlets such as California Management Review and Harvard Business Review.



Pilar Basilic and Ebro river photo by Daniel Marco

CERTIFICATE

The PhD Summer Academy 2019 program is administered under the MIT-Zaragoza International Logistics Program, one of the select [MIT educational and research partnerships](#). Upon completion of all courses to which you have enrolled, you will be awarded a certificate stating that you have completed a PhD summer course under the MIT- Zaragoza Program.





PhD Summer Academy 2018

"The PhD summer academy at ZLC was an excellent avenue to develop myself as an academic within the supply chain sector. An intensive course conducted by academics who are leaders in their respective fields in SCM is ideal for any budding academic. Not only in broadening SCM knowledge, but also in learning emerging trends in SCM and publishing in top-tiered SCM journals. Moreover, learning alongside PhD students and early career academics from different countries exploring different niche areas in SCM broadened my horizons as a young academic. I strongly recommend any doctoral candidate in SCM to invest two weeks of their time here - they will not regret it."

Jubin Jacob John – PhD SA 2018

PhD student - La Trobe University, Australia

I had a pleasure of teaching in MIT ZLC Ph.D. Academy twice and I would highly recommend it to both faculty and students. Students in the Academy come from many countries and several continents. Some of them are at the beginning of their Ph.D. programs, while others already hold post-doc and faculty jobs. Despite their diverse backgrounds, students are united in their motivation, their passion for learning, and their desire to grow as researchers. They work very hard and they have a great time, learning as well as socializing, enjoying Spanish cuisine and culture. The Academy provides them with a unique opportunity to form lasting bonds with their fellow students and to network with the world-class faculty that teaches at the Academy. Although I have interacted with the ZLC Ph.D. Academy students for a relatively short time, I enjoy meeting them at professional conferences and observing how their careers develop, just as I do with my Ph.D. students....In one word, ZLC Ph.D. Academy is great!

Volodymyr Babich, PhD

Associate professor of Operations and Information Management

McDonough School of Business, Georgetown University, US



PhD Summer Academy 2019

MIT-Zaragoza International Logistics Program
Zaragoza Logistics Center
Avenida de Ranillas 5, edificio 5A (EXPO), planta baja
50018 Zaragoza (Spain)
Tel: + 34 976

phdacademy@zlc.edu.es
www.zlc.edu.es/phd-summer-academy

Gültekin Kuyzu

PhD Summer Academy Director
gkuyzu@zlc.edu.es

Lucía Álvarez

PhD Summer Academy Admissions Office:
Registration, accommodation, visa requirements
lavarez@zlc.edu.es

IT Support

IT Department: IT support, access cards to the ZLC building and facilities
support@zlc.edu.es



Programa Operativo Fondo Social Europeo de Aragón 2014-2020
Construyendo Europa desde Aragón