

## Curriculum vitae

# CHRISTOF DEFRYN

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## Personalia

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## Research Interests and specialities

- **Collaborative logistics.** The development of decision support tools for joint logistics optimization in a multi-partner setting. This involves the construction of shared vehicle routes, the design of optimal coalition configurations and the inclusion of fair cost (or profit) allocation mechanisms.
- **Synchromodality and the Physical Internet.** Study the working of integrated logistics networks with respect to synchromodal planning (algorithmic design), pricing and gain sharing.
- **Warehouse operations.** Combinatorial optimization for logistical planning in highly structured environments and improved order picking efficiency through anticipatory picking and demand prediction.

**Keywords:** vehicle routing problem; horizontal collaboration; collaborative logistics; (meta)heuristic algorithms; multi-objective optimization; order picking; warehouse operations planning; physical internet.

## Professional experience

Since Feb/2019	<b>Guest professor</b> <i>Engineering Management Department</i> <i>University of Antwerp, Belgium</i>
Since Oct/2017	<b>Assistant professor Operations Research</b> <i>Department of Quantitative Economics</i> <i>School of Business and Economics, Maastricht University, The Netherlands</i>
Jun/2017-Aug/2017	<b>Visiting researcher</b> <i>University of Maryland, US</i> Joint work (with Bruce Golden, Edward Wasil and Debdatta Sinha Roy) on the close-enough vehicle routing problem. More specifically, we focused on the integration of data analytics, statistics and vehicle routing to address the uncertainty in the meter reading for utility companies using RFID technology.

## Education

Oct/2012-Sep/2017	<b>PhD Researcher in Applied Economics</b> <i>University of Antwerp, Belgium</i> “MODELS FOR OPERATIONAL OPTIMISATION IN A HORIZONTAL LOGISTIC COOPERATION. GAIN SHARING, INCENTIVES AND MULTI-LEVEL OBJECTIVES.” The main goal of my PhD was to develop solution methods and algorithms for solving collaborative vehicle routing problems. I looked at facilitating the decision-making in a horizontal logistic cooperation, where multiple partners aim at jointly organizing and optimizing their logistical activities. Besides the construction of optimal shared routes, I studied the optimal coalition configuration, the inclusion of a fair cost allocation approach and developed optimisation models in which individual partner interests could be integrated in the logistic optimisation problem. <i>Supervisor: Prof. dr. Kenneth Sørensen</i>
Sep/2010-Sep/2012	<b>Msc in Business Engineering</b> <i>University of Antwerp, Belgium</i> Production management & Research methodology Thesis on “Profit estimation in a horizontal logistic cooperation”
Sep/2007-Jun/2010	<b>Bsc in Business Engineering</b> <i>University of Antwerp, Belgium</i>

## Additional courses / trainings

2020	Training working in international teams <i>Trainer: Nava Hinrichs-Passuto</i> <i>Institution: Maastricht University</i>
2019	Supervision of PhD students <i>3-day Training provided by ElroyCOM</i>
2013	VRP2013 // Spring school on the Vehicle Routing Problem <i>Teachers: Prof. D. Vigo, Prof. C. Prins, Prof. D. Feillet, Prof. M. Gendreau &amp; Prof. V. Pillac</i> <i>Institution: Institute of Applied Mathematics (IMA), Université Catholique de l'Ouest, Angers, France</i>  Advanced optimisation techniques <i>Teacher: Prof. dr. K. Sørensen</i> <i>Institution: University of Antwerp, Belgium</i>
2012	Combinatorial optimisation and local search techniques <i>Teacher: Prof. dr. J. Beliën</i> <i>Institution: KU Leuven, Belgium</i>

# RESEARCH

## A. Publications

### Publications under preparation

- Marieke Vonk, Christof Defryn. “The impact and dynamics of (intertemporal) vessel collaboration on inland waterway navigation and fuel emissions”  
*Status: writing mostly done, experiments to be finalized*
- Rajabighamchi Farzaneh, Defryn Christof, Van Hoesel Stan. “Improved formulation for the order picking in structured networks”
- Tran Son, Jorge Almeida Rui, Defryn Christof. “Anticipatory order picking”  
*Status: Finalizing paper for submission*
- Ilgin Efe Şenyuva, Tim Oosterwijk, Christof Defryn. “Parcel routing in the physical internet”
- Christof Defryn, Kenneth Sørensen. “OR challenges in the physical internet”
- Sinha Roy Debdatta, Defryn Christof, Golden Bruce, Wasil Edward. “Data-Driven Optimization and Statistical Modeling to Improve Meter Reading for Utility Companies”

### Publications under revision

- Julian Golak, Christof Defryn , Alexander Grigoriev. “Optimizing Fuel Consumption on Inland Waterway Networks”  
*Status: currently working on revisions for publication in OMEGA*
- Hacardiaux Thomas, Defryn Christof, Tancrez Jean-Sébastien, Verdonck Lotte. “Balancing partner preferences for logistics costs and carbon footprint in a horizontal cooperation”  
*Status: revised version of the paper submitted to OR spectrum (after major revisions)*
- Hacardiaux Thomas, Defryn Christof, Verdonck Lotte, Tancrez Jean-Sébastien. “Partner selection accounting for product characteristics in horizontal collaboration”  
*Status: awaiting feedback after first submission to International Transactions in Operational Research*

### Journal publications

- |             |   |
|-------------|---|
| <b>2020</b> | Julian Arthur Pawel Golak, Christof Defryn, Veerle Timmermans, and Grigoriev Alexander. “Inland waterway efficiency through skipper collaboration and joint speed optimization”. In: <i>European Journal of Operational Research</i> (2020)<br><i>[Impact factor (2019): 4.213, GSBE journal classification: A]</i> |
| <b>2019</b> | Christof Defryn, Kenneth Sørensen, and Wout Dullaert. “Integrating partner objectives in horizontal logistics optimisation models”. In: <i>Omega</i> 82 (2019), pp. 1–12<br><i>[Impact factor (2016): 4.029, GSBE journal classification: A]</i>  |
| <b>2018</b> | Christof Defryn and Kenneth Sørensen. “Multi-objective optimisation models for the travelling salesman problem with horizontal cooperation”. In: <i>European Journal of Operational Research</i> 267.3 (2018), pp. 891–903<br><i>[Impact factor (2016): 3.297, GSBE journal classification: A]</i>                  |

- 2017 | Christof Defryn and Kenneth Sörensen. “A fast two-level variable neighborhood search heuristic for the clustered vehicle routing problem”. In: *Computers & Operations Research* 83 (2017), pp. 78–94 [Impact factor (2016): 2.600, GSBE journal classification: B+]
- 2016 | Christof Defryn, Kenneth Sörensen, and Trijntje Cornelissens. “The selective vehicle routing problem in a collaborative environment”. In: *European Journal of Operational Research* 250.2 (2016), pp. 400–411 [Impact factor (2016): 3.297, GSBE journal classification: A]

## Research monographs, chapters

- 2019 | Christof Defryn, Julian Golak, Alexander Grigoriev, and Veerle Timmermans. “Inland Waterway Efficiency Through Skipper Collaboration and Joint Speed Optimization”. In: *Mathematical Optimization Theory and Operations Research*. Ed. by Michael Khachay, Yury Kochetov, and Panos Pardalos. Springer, 2019, pp. 202–217
- 2017 | Christof Defryn. “Models for operational optimisation in a horizontal logistic cooperation: gain sharing, incentives and multi-level objectives”. PhD thesis. University of Antwerp, 2017
- 2016 | Christof Defryn, Christine Vanovermeire, and Kenneth Sörensen. “Gain Sharing in Horizontal Logistic Co-operation: A Case Study in the Fresh Fruit and Vegetables Sector”. In: *Sustainable Logistics and Supply Chains*. Ed. by Meng Lu and Joost De Bock. Contributions to Management Science. Springer International Publishing, 2016, pp. 75–89

## Research papers

- 2020 | Thomas Hacardiaux, Christof Defryn, Jean-Sébastien Tancrez, and Lotte Verdonck. *Balancing partner preferences for logistics costs and carbon footprint in a horizontal cooperation*. Tech. rep. Maastricht University, 2020
- 2019 | Debdatta Sinha Roy, Christof Defryn, Bruce Golden, and Edward Wasil. *Data-Driven Optimization and Statistical Modeling to Improve Meter Reading for Utility Companies*. Tech. rep. Maastricht University, 2019
- 2015 | Christof Defryn, Kenneth Sörensen, and Trijntje Cornelissens. *The selective vehicle routing problem in a collaborative environment*. Tech. rep. University of Antwerp, 2015
- 2015 | Christof Defryn and Kenneth Sörensen. *A two-level Variable Neighbourhood Search for the Euclidean Clustered Vehicle Routing Problem*. Tech. rep. University of Antwerp, 2015
- 2014 | Christof Defryn and Kenneth Sörensen. *Gain sharing in horizontal logistic collaboration – a case study in the fresh fruit and vegetables sector*. Tech. rep. University of Antwerp, 2014

## B. Research dissemination

### Invited seminars

- 26/01/2019 | Christof Defryn. *Supermarket Math*. 25th Mathematical modelling competition, Maastricht. Jan. 2019

10/01/2019	Christof Defryn. <i>Uncertainty in logistics: Probabilistic meter reading and anticipatory order picking</i> . Vrije Universiteit Amsterdam. Jan. 2019
17/01/2018	Christof Defryn. <i>An introduction to cost allocation: Rule of thumb vs. cooperative game theory</i> . Jan. 2018
19/02/2014	Christof Defryn. <i>The cost allocation game in practice – What can Shapley do for me?</i> Jan. 2014

## Presentations at National and International Conferences

Notice: The author mentioned first was the presenter.

10/2021	INFORMS Annual Meeting - invited presentation in the stream on collaborative logistics
07-13/11/2020	Christof Defryn and Marieke Vonk. “The impact and dynamics of (intertemporal) vessel collaboration on inland waterway navigation and fuel emission”. In: <i>INFORMS Annual meeting</i> . Virtual conference, 2020
15-18/07/2019	Julian Golak, Veerle Timmermans, Alexander Grigoriev, and Christof Defryn. “Inland waterway efficiency through skipper collaboration and joint speed optimization”. In: <i>7th INFORMS Transportation Science and Logistics Society Workshop</i> . Vienna, Austria, 2019
15-18/07/2019	Thomas Hacardiaux, Christof Defryn, and Tancrez Jean-Sébastien. “Multi-objective optimization framework for the integration of individual partner interests in a collaborative location-inventory model”. In: <i>7th INFORMS Transportation Science and Logistics Society Workshop</i> . Vienna, Austria, 2019
08-12/07/2019	Alexander Grigoriev, Julian Golak, Veerle Timmermans, and Christof Defryn. “Inland waterway efficiency through skipper collaboration and joint speed optimization”. In: <i>MOTOR2019: Mathematical optimization theory and operations research</i> . Ekaterinburg, Russia, 2019
23-26/06/2019	Christof Defryn, Son Tran, and Rui Jorge Almeida. “Warehouse optimization through anticipatory order picking”. In: <i>EURO2019: 30th European Conference on Operational Research</i> . Dublin, Ireland, 2019
03-07/06/2019	Julian Golak, Veerle Timmermans, Alexander Grigoriev, and Christof Defryn. “Inland waterway efficiency through skipper collaboration and joint speed optimization”. In: <i>MAPSP 2019: 14th Workshop on Models and Algorithms for Planning and Scheduling Problems</i> . Renesse, Netherlands, 2019
07-08/02/2019	Christof Defryn. “A selective vehicle routing formulation for the order picking problem”. In: <i>ORBEL33: 33rd Annual Conference of the Belgian Operations Research Society</i> . Hasselt, Belgium, 2019
06-08/01/2019	Debdatta Sinha Roy, Christof Defryn, Bruce Golden, and Edward Wasil. “Data-Driven Optimization and Statistical Modeling to Improve Meter Reading for Utility Companies.” In: <i>ICS2019: INFORMS Computing Society Conference</i> . Knoxville, Tennessee, US, 2019
04-07/11/2018	Debdatta Sinha Roy, Christof Defryn, Bruce Golden, and Edward Wasil. “Data-Driven Optimization and Statistical Modeling to Improve Meter Reading for Utility Companies.” In: <i>INFORMS2018: INFORMS Annual meeting</i> . Phoenix, Arizona, US, 2018
01-02/02/2018	Christof Defryn, Debdatta Sinha Roy, and Bruce Golden. “Addressing Uncertainty in Meter Reading for Utility Companies using RFID Technology: Simulation Experiments.” In: <i>ORBEL32: 32st Annual Conference of the Belgian Operations Research Society</i> . Liège, Belgium, 2018

02-03/02/2017	Christof Defryn, Kenneth Sörensen, and Wout Dullaert. “Horizontal logistic cooperations. Integration of individual partner objectives in multi-partner logistic optimisation models.” In: <i>ORBEL31: 31st Annual Conference of the Belgian Operations Research Society</i> . Brussels, Belgium, 2017
06-08/06/2016	Christof Defryn and Kenneth Sörensen. “Horizontal co-operation in a clustered distribution environment. Exchanging zones for increased efficiency”. In: <i>VEROLOG2016: Annual workshop of the EURO working group on Vehicle Routing and Logistics optimization</i> . Nantes, France, 2016
28-29/01/2016	Christof Defryn and Kenneth Sörensen. “Horizontal co-operation in a clustered distribution environment. Exchanging zones for increased efficiency”. In: <i>ORBEL30: 30th Annual Conference of the Belgian Operations Research Society</i> . Louvain-La-Neuve, Belgium, 2016
12-15/07/2015	Christof Defryn and Kenneth Sörensen. “A multi-objective collaborative approach for the Travelling Salesman Problem with Time Windows”. In: <i>EURO2015: European Conference on Operational Research</i> . Glasgow, UK, 2015
08-10/06/2015	Christof Defryn and Kenneth Sörensen. “A multi-objective collaborative approach for the Vehicle Routing Problem with Time Windows”. In: <i>VeRoLoG2015: EURO Working Group on Vehicle Routing and Logistics Optimization</i> . Vienna, Austria, 2015
08-10/12/2014	Christof Defryn, Kenneth Sörensen, and Trijntje Cornelissens. “The Selective Vehicle Routing Problem in a collaborative environment”. In: <i>ALIO-EURO conference</i> . Montevideo, Uruguay, 2014
13-18/07/2014	Christof Defryn and Kenneth Sörensen. “The clustered vehicle routing problem: a two-level variable neighbourhood search”. In: <i>EURO/IFORS conference</i> . Barcelona, Spain, 2014
24-25/03/2014	Christof Defryn and Kenneth Sörensen. “The clustered vehicle routing problem: a variable neighbourhood metaheuristic”. In: <i>15th EU/ME workshop</i> . Istanbul, Turkey, 2014
30-31/01/2014	Christof Defryn and Kenneth Sörensen. “The collaborative selective vehicle routing problem: vehicle routing in a collaborative environment”. In: <i>ORBEL28: 28th Annual Conference of the Belgian Operations Research Society</i> . Mons, Belgium, 2014
20-24/05/2013	Christof Defryn and Kenneth Sörensen. “The collaborative team orienteering problem (poster)”. In: <i>VRP2013: European spring school on vehicle routing</i> . Angers, France, 2013
07-08/02/2013	Christof Defryn, Christine Vanovermeire, and Kenneth Sörensen. “The effect of customer characteristics on coalition gains in collaborative vehicle routing”. In: <i>ORBEL27: 27th Annual Conference of the Belgian Operations Research Society</i> . Kortrijk, Belgium, 2013

## C. Funding received so far

2020	<b>YERUN Research Mobility Award</b> (1,000€) Competitive award for PhD students, Postdocs and early career researchers to cover expenses related to a research visit at a YERUN University
2019	<b>Special Research Fund 2019, Doctoral grant in the framework of UHasselt – Maastricht University cooperation</b> (~ 110,000€) from Bijzonder Onderzoeksfonds (BOF)
2018	<b>Small scale research grant</b> (4,000€) from Graduate School of Business and Economics, Maastricht University (GSBE)

- (grant no. G.18.5213)
- 2017** | **Travel grant for study abroad** (6,200 €) from Research Foundation - Flanders (FWO)  
(grant no. V429117N)
- 2015** | **PhD fellowship – renewal** (~ 90,000 €) from Research Foundation - Flanders (FWO)  
(grant no. 11Q1616N)
- 2013** | **PhD fellowship** (~ 90,000 €) from Research Foundation - Flanders (FWO)  
Success rate (2013) = 23%  
(grant no. 11G4813N)

## D. Research recognition

**Since 2018** | Maastricht University, Graduate School of Business and Economics (GSBE) Fellowship

# TEACHING

## A. Teaching education

<b>2020</b>	Master thesis supervision (UTQ workshop)
<b>2019</b>	Educational service design (UTQ workshop) Cognitive and motivational effects on learning behaviour (UTQ workshop) Administration and procedures of assessment (UTQ workshop) Different assessment types (UTQ workshop) Development of assessment: Open ended questions/papers (UTQ workshop)
<b>2018</b>	General principles of assessment (UTQ workshop) Group dynamics in international classrooms (UTQ workshop)
<b>2017</b>	PBL Tutor training

## B. Teaching experience

### School of Business and Economics, Maastricht University, The Netherlands <sup>1</sup>

<b>Since 2021</b>	Advanced Operations Research (Master Econometrics and Operations Research) <i>Roles: course coordinator, design of materials, tutor</i>
<b>2019</b>	Production planning and management (University college, Venlo) <i>Roles: course coordinator, tutor</i>
<b>Since 2018</b>	Operations Management (Bachelor International Business) <i>Roles: course coordinator, design of materials, design of exams, lecturer, tutor</i> Quantitative Introduction to Business (Bachelor Econometrics and Operations Research) <i>Roles: tutor</i> Supply chain operations (Master International Business, Supply chain management track) <i>Roles: course coordinator, design of exams, design of materials, lecturer, tutor</i> Management of Operations and Product Development (Bachelor International Business) <i>Roles: tutor</i>
<b>2017-2020</b>	Special topics in Logistics/Operations Management (Research master, Econometrics and Operations Research) <i>Roles: course coordinator, design of materials, examination, tutor</i>

### Faculty of Business and Economics, University of Antwerp, Belgium

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<sup>1</sup>The educational system at MUSBE is focused on problem-based learning (PBL). As opposed to other traditional educational approaches, PBL is an enquiry-guided learning method characterised by active learning in small groups where solving interesting real-life problems is central to the learning process.

<b>Since 2020</b>	ICT in supply chain management (Master Business Engineering, supply chain track) <i>Roles: course coordinator, design of materials, design of exams, lecturer, tutor</i>
<b>Since 2019</b>	Simulatietechnieken (Master Business Engineering, Supply Chain track) <i>Roles: course coordinator, design of materials, examination, lecturer</i>
<b>2015-2018</b>	Optimalisatie in de logistiek (Master Business Engineering, Supply Chain track) <i>Roles: guest lecturer</i>  Advanced supply chain management (Master Business Engineering, Supply Chain track) <i>Roles: guest lecturer</i>
<b>2012-2017</b>	Projectmanagement (Master Business Engineering) <i>Roles: tutor</i>

# LEADERSHIP

## A. PhD supervision

*Notice: According to the Dutch regulations, only full professors (and since 2017 also associate professors under certain conditions) can be the main supervisor of a PhD candidate. Because of that, I can officially only act as a co-supervisor.*

Since 09/2020	Jasper Paesen <i>Title: Internal and external pricing in a collaborative synchromodal network</i> <i>Institution: SBE, Maastricht University + UHasselt</i> <i>Role: co-supervisor</i>
Since 09/2019	Son Tran <i>Title: Anticipatory warehouse operations</i> <i>Institution: SBE, Maastricht University</i> <i>Role: co-supervisor</i>
Since 02/2019	Farzaneh Rajabighamchi <i>Title: Applications in routing and logistics</i> <i>Institution: SBE, Maastricht University</i> <i>Role: co-supervisor</i>
Since 10/2017	Julian Golak <i>Title: Optimization of vessel movements on inland waterways</i> <i>Institution: SBE, Maastricht University</i> <i>Role: co-supervisor</i>

## B. PhD committee / jury membership

2021	Thomas Hacardiaux <i>Title: Benefits of horizontal cooperation in supply chains</i> <i>Institution: Université Catholique de Louvain. Louvain School of Management</i> <i>Role: External jury member</i>
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## C. Research assistant supervision

09/2019-05/2020	Marieke Vonk <i>Title: Inland waterway optimization through skipper collaboration</i> <i>Institution: SBE, Maastricht University</i>
09/2018-05/2019	Son Tran. <i>Title: Anticipatory order picking</i> <i>Institution: SBE, Maastricht University</i>

## D. Master thesis supervision

2020	Alexander McGirr <i>Title: Properties of Realistic Collaborative Minimum Cost Flow Problems</i> <i>Institution: SBE, Maastricht University</i>
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- Marieke Vonk  
*Title: The impact and dynamics of (intertemporal) vessel collaboration on inland waterway navigation and fuel emissions*  
*Institution: SBE, Maastricht University*
- Robin Jongen  
*Title: A Performance Analysis of Forecasting Techniques on Various Datasets, a Quantitative Simulation Analysis*  
*Institution: SBE, Maastricht University*
- Xuxi Cao  
*Title: A Simulation Analysis on the Integration Approach of Mitigation Strategies for Managing a Supply Chain Disruption*  
*Institution: SBE, Maastricht University*
- 2019** Emiel Rommelse  
*Title: Warehouse optimization in various layout warehouses. Developing an order batching and re-slotting tool for DSV Solutions*  
*Institution: SBE, Maastricht University*
- Jana Höller-Bongartz  
*Title: Can blockchain technology improve the traceability in supply chains in the food and pharmaceutical industry?*  
*Institution: SBE, Maastricht University*
- Laura Van Vledder  
*Title: Guaranteeing inventory service levels using ARIMA demand forecasting v.s. the capacitated vehicle routing problem with time deadlines*  
*Institution: SBE, Maastricht University*
- Xinxin He  
*Title: How to make the cold chain more agile? A study in the pharmaceutical industry*  
*Institution: SBE, Maastricht University*
- 2018** Jolan De Schutter  
*Title: Horizontal logistic cooperation and inventory management*  
*Institution: Faculty of applied economics, Antwerp University*
- Wouter Spiessens  
*Title: Partner selection in horizontal logistic cooperation*  
*Institution: Faculty of applied economics, Antwerp University*
- 2017** Julie Pollet and Julie Van Den Bogaert  
*Title: Horizontal collaborations in logistics. Key performance indicators for partner selection in shipper collaborations*  
*Institution: Faculty of applied economics, Antwerp University*
- David Verbiest and Jeroen Lambrechts  
*Title: Solving the feature selection problem using metaheuristics.*  
*Institution: Faculty of applied economics, Antwerp University*
- Amitkumar Vaghasiya  
*Title: Introducing horizontal collaboration and gain sharing concepts to increase efficiency in transport and logistics in Dubai and Abu Dhabi*  
*Institution: Institute of transport and maritime management, Antwerp University*

## E. Bachelor thesis supervision

- 2020** Anne-Kett Bassing  
*Title: Synchronodal Pricing. The proposal and comparison of two service-based pricing mechanisms*  
*Institution: SBE, Maastricht University*
- Izzy Mehigan  
*Title: Digital Routing Decisions in the PI. A look at how current protocols in the digital internet could support routing decision in the Physical Internet environment*  
*Institution: SBE, Maastricht University*
- 2019** Cynthia Luijkx  
*Title: Physical Internet & Real-Time Disruptions. Investigating the sensitivity to real-time disruptions of a new logistics paradigm*  
*Institution: SBE, Maastricht University*
- Selina Meeks  
*Title: Anticipatory order batching. Online order batching with expected orders*  
*Institution: SBE, Maastricht University*
- Wenjun Song  
*Title: The optimal allocation of  $\pi$ -containers to multiple carriers within a multimodal transport network*  
*Institution: SBE, Maastricht University*
- 2018** Giorgia d'Arcano  
*Title: The potential of learning algorithms in logistics*  
*Institution: SBE, Maastricht University*
- Marieke Vonk  
*Title: Congested warehouses*  
*Institution: SBE, Maastricht University*
- 2017** Iselle De Beuckeleer, Laura Comhaire and Louise Versavel  
*Title: Opportunities for logistics in smart cities*  
*Institution: Faculty of applied economics, Antwerp University*
- Aschwin Bauwens, Alexander Jacobs and Toon Keulemans  
*Title: Opportunities for logistics in smart cities*  
*Institution: Faculty of applied economics, Antwerp University*
- 2014** Arno Reynders, Louis Gabriels and Maxime Krug  
*Title: Recent advances in logistics*  
*Institution: Faculty of applied economics, Antwerp University*

# SERVICE

## A. Institutional responsibilities

<b>2020-2024</b>	Member of Maastricht Young Academy (MYA) <i>Local division of the Young Academy. MYA is a group of early-career scientists from Maastricht University, whose aim is to operate as an independent — and, when necessary critical — platform within the university. The focus of the MYA lies primarily on four thematic pillars: science policy, science communication, interdisciplinary research and internationalisation.</i>
<b>Since 2019</b>	Member of International Classroom Committee (Maastricht University) <i>The committee decides on the admission for new students applying for the ‘International Business’ and ‘Economics and Business Economics’ programme.</i>
<b>Since 2021</b>	Member of the Assurance Group on Greening UM International Travel
<b>2019-2020</b>	Member of the Task Force Sustainable Employability (Maastricht University)
<b>2017</b>	AAP/BAP representative departmental council ENM (University of Antwerp)

## B. Contributions to academic publishing

### Journal guest editor

<b>Since 2020</b>	<i>Logistics</i> – Special issue on “Collaborative Logistics”
<b>2016-2017</b>	<i>Open Mathematics</i> – Topical issue on metaheuristics: methods and applications.

### Ad hoc reviewing for academic journals

- Algorithms
- Applied Soft Computing
- Computers & Industrial Engineering
- Computers & Operations Research
- European Journal of Operational Research
- European Journal of Industrial Engineering
- European Transport Research Review
- Expert Systems With Applications
- International Journal of Electrical and Computer Engineering
- Journal of Business Economics
- Networks
- OMEGA
- Operational Research
- Operations Research and Decisions
- Optimization letters
- OR Spectrum
- RAIRO Operations Research
- Research in Transportation Business & Management
- Resources, conservation & recycling
- Transportation Research: part B
- Transportation Research: part E

## Ad hoc reviewing for conferences

- EU/ME2016 // Workshop on Design and Analysis of Metaheuristics
- EWGT // Euro Working Group on Transportation
- MEIE // International Conference on Mechanical, Electric and Industrial Engineering
- ORBEL29 // Annual conference of the Belgian Operational Research Society

## C. Organisation of international conferences

<b>17-18/03/2016</b>	EU/ME2016 // Workshop on Design and Analysis of Metaheuristics <i>EWG EU/ME is the European working group on Metaheuristics, uniting over 1400 members from over 80 countries. For this two-day workshop, hosted at the University of Antwerp, I acted as the main organiser and head of the organising committee.</i>
<b>05-06/02/2015</b>	ORBEL29 // Annual conference of the Belgian Operational Research Society <i>The yearly ORBEL conference, unites over 100 researchers in the fields of operational research, statistics, pattern recognition and related disciplines. When hosted by the ANTOR research group at the University of Antwerp, I was an active member of the organising committee.</i>

## D. Membership of scientific societies

<b>BETA</b>	Research School for Operations Management and Logistics
<b>GSBE</b>	Research fellow of Graduate School of Business and Economics (Maastricht)
<b>LNMB</b>	Landelijk Netwerk Mathematische Besliskunde
<b>MCM</b>	Mathematics Center Maastricht

## E. Service recognition

<b>2020</b>	Outstanding Reviewer Award of OR Spectrum <a href="https://doi.org/10.1007/s00291-021-00625-0">https://doi.org/10.1007/s00291-021-00625-0</a>
<b>2018</b>	Best Reviewer 2018, Certificate from <i>OMEGA The International Journal of Management Science</i>