



5th International Workshop on Freight Transportation and Logistics

May 21 - 25, Mykonos, Greece

Workshop Schedule



ATHENS UNIVERSITY
of ECONOMICS & BUSINESS
mbainternational





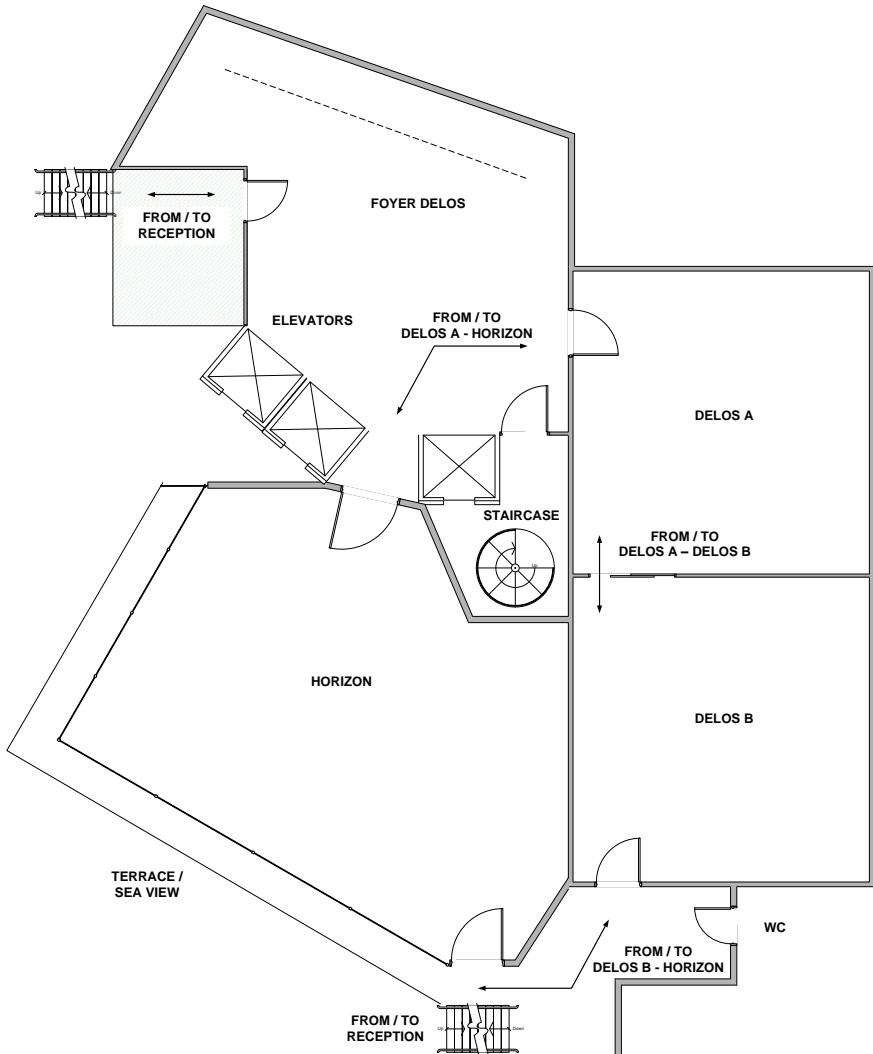
Event Timeline

DATE		TIME	EVENT
May 20	Sunday	20:00	Welcome Reception
May 21	Monday	08:30 – 08:50	Opening Session
		09:00 – 10:30	Sessions Mo.1.(a,b,c)
		10:30 – 11:00	Coffee Break
		11:00 – 12:30	Sessions Mo.2.(a,b,c)
		12:30 – 14:30	Lunch
		14:30 – 16:00	Sessions Mo.3.(a,b,c)
		16:00 – 16:30	Coffee Break
		16:30 – 18:00	Sessions Mo.4.(a,b,c)
May 22	Tuesday	09:00 – 10:30	Sessions Tu.1.(a,b,c)
		10:30 – 11:00	Coffee Break
		11:00 – 12:30	Sessions Tu.2.(a,b,c)
		12:30 – 14:30	Lunch
		14:30 – 16:00	Sessions Tu.3.(a,b,c)
		16:00 – 16:30	Coffee Break
		16:30 – 18:00	Sessions Tu.4.(a,b,c)
May 23	Wednesday	07:45 – 15:00	Excursion to Delos
		15:00 – 16:00	Lunch
May 24	Thursday	09:00 – 10:30	Sessions Th.1.(a,b,c)
		10:30 – 11:00	Coffee Break
		11:00 – 12:30	Sessions Th.2.(a,b,c)
		12:30 – 14:00	Lunch
		14:00 – 15:30	Sessions Th.3.(a,b,c)
		15:30 – 16:00	Coffee Break
		16:00 – 18:00	Sessions Th.4.(a,b,c)
		20:30	Workshop Dinner and Party
May 25	Friday	09:00 – 10:30	Sessions Fr.1.(a,b,c)
		10:30 – 11:00	Coffee Break
		11:00 – 12:30	Sessions Fr.2.(a,b,c)
		12:30 – 14:30	Lunch
		14:30 – 16:00	Sessions Fr.3.(a,b,c)
		16:00 – 16:30	Coffee Break
		16:30 – 18:00	Sessions Fr.4.(a,b)
		20:00	Farewell Drinks

Facilities Layout

Event	Meeting Room
Opening Session	DELOS A + DELOS B (joined)
Sessions ".a"	DELOS A
Sessions ".b"	DELOS B
Sessions ".c"	HORIZON

All meeting rooms are located one level above the Reception Desk of the *Royal Myconian Resort*.



Regular Sessions

TIME SLOT \ ROOM	DELOS A	DELOS B	HORIZON	
Monday	09:00 – 10:30	Vehicle Routing I	Railway Logistics	Ship Routing and Scheduling
	11:00 – 12:30	Stochastic Routing I	Capacitated Vehicle Routing Problem	City Logistics I
	14:30 – 16:00	Inventory Routing I	Network Models for Humanitarian Logistics	Maritime Logistics I
	16:30 – 18:00	Network Design I	Dial-a-Ride Routing	Stochastic Routing II
Tuesday	09:00 – 10:30	Multi-Period Routing	Maritime Logistics II	Vehicle Routing II
	11:00 – 12:30	Arc Routing I	City Logistics II	Sustainable Routing
	14:30 – 16:00	Two-Echelon Routing	Vehicle Routing III	Routing and Scheduling I
	16:30 – 18:00	Arc Routing II	Home Health Care Logistics	Routing and Scheduling II
Thursday	09:00 – 10:30	Traveling Salesman Problem Variants	Container Logistics	Routing I
	11:00 – 12:30	Transportation Risk	Packing Logistics	Dynamic Routing
	14:00 – 15:30	Time-Dependent Routing	Scheduling	Inventory Routing II
	16:00 – 18:00	Production -- Distribution	Freight Transportation Networks	Vehicle Routing IV
Friday	09:00 – 10:30	Vehicle Routing V	Maritime Transportation I	Network Design II
	11:00 – 12:30	Maritime Transportation II	Emergency Logistics	Dynamic Vehicle Routing
	14:30 – 16:00	Routing with Loading Constraints	Routing II	Network Design and Uncertainty
	16:30 – 18:00	Location-Routing	Supply Chain Logistics	–

Monday, 09:00 – 10:30

Session Mo.1.a: Vehicle Routing I

DELOS A

Chair: *Frédéric Semet, École Centrale de Lille*

09:00 – 09:30 A Continuous Approximation Model for the Fleet Composition Problem
Ola Jabali, Gilbert Laporte and Michel Gendreau

09:30 – 10:00 A Polyhedral Approach for Generalizing the Miller-Tucker-Zemlin Subtour Elimination Constraints for Routing Problems
Tolga Bektaş and Luis Gouveia

10:00 – 10:30 An Exact Method to Solve the Multi-trip Vehicle Routing Problem with Multi Time Windows
Florent Hernandez, Frédéric Semet, Rodolphe Giroudeau and Olivier Naud

Session Mo.1.b: Railway Logistics

DELOS B

Chair: *Michel Bierlaire, École Polytechnique Fédérale de Lausanne*

09:00 – 09:30 Optimal Loading Plan for Multiple Trains in Container Terminals
Davide Anghinolfi, Lorenzo Foti, Marco Maratea, Massimo Paolucci and Silvia Siri

09:30 – 10:00 The Locomotive Fleet Fueling Problem
Mor Kaspi and Tal Raviv

10:00 – 10:30 Cost Optimization for the Capacitated Railroad Blocking and Train Design Problem
Burak Boyaci, Viswanathan Prem Kumar, Stefan Binder and Michel Bierlaire

Session Mo.1.c: Ship Routing and Scheduling

HORIZON

Chair: *Kjetil Fagerholt, Norwegian University of Science and Technology*

09:00 – 09:30 Robust Planning of Refinery Operations with Uncertain Ship Arrivals
Jens Bengtsson, David Bredström, Patrik Flisberg and Mikael Rönnqvist

09:30 – 10:00 A Branch-and-Price Method for a Ship Routing and Scheduling Problem with Coupling and Synchronization Constraints
Magnus Stålhane, Henrik Andersson and Marielle Christiansen

10:00 – 10:30 A Branch-and-Price Algorithm for a Fleet Deployment Problem with Fairly Evenly Spread Voyages
Inge Norstad, Henrik Andersson, Kjetil Fagerholt and Magnus Stålhane

Monday, 11:00 – 12:30

Session Mo.2.a: Stochastic Routing I

DELOS A

Chair: *Patrick Jaillet, Massachusetts Institute of Technology*

11:00 – 11:30 The Robust Rounded Capacity Inequalities
Chrysanthos E. Gounaris, Wolfram Wiesemann and Christodoulos A. Floudas

11:30 – 12:00 A Pickup and Delivery Single Vehicle Routing Problem with Stochastic Demands
Dimitrios G. Pandelis, Constantinos C. Karamatsoukis and Epaminondas G. Kyriakidis

12:00 – 12:30 Routing Optimization with Deadlines under Uncertainty
Patrick Jaillet, Jin Qi and Melvyn Sim

Session Mo.2.b: Capacitated Vehicle Routing Problem

DELOS B

Chair: *Jens Lygaard, Aarhus University*

11:00 – 11:30 An Exact Approach for the Clustered Vehicle Routing Problem
Maria Battarra, Güneş Erdoğan and Daniele Vigo

11:30 – 12:00 Circuit based formulations for the Unit Demand Vehicle Routing Problem
Luis Gouveia, Pierre Pesneau and Maria Teresa Godinho

12:00 – 12:30 Dual-Optimal Inequalities for the Capacitated Vehicle Routing Problem
Jens Lygaard

Session Mo.2.c: City Logistics I

HORIZON

Chair: *Teodor Gabriel Crainic, Université du Québec à Montréal and CIRRELT*

11:00 – 11:30 A Collaborative Freight Transportation System in City Logistics
Frédéric Semet, Luce Brotcorne and Alexandre Huart

11:30 – 12:00 The City Logistics Facility Location Problem
Nabil Absi, Dominique Feillet, Thierry Garaix and Olivier Guyon

12:00 – 12:30 Modelling Demand Uncertainty in Two-Tiered City Logistics Planning – A Monte Carlo Study
Fausto Errico, Walter Rei, Nicoletta Ricciardi and Teodor Gabriel Crainic

Monday, 14:30 – 16:00

Session Mo.3.a: Inventory Routing I

DELOS A

Chair: *Ann Melissa Campbell, University of Iowa*

14:30 – 15:00 A Two-Stage Decomposition Algorithm for Single Product Maritime Inventory Routing
Dimitri J. Papageorgiou, George L. Nemhauser, Joel Sokol and Ahmet B. Keha

15:00 – 15:30 Efficient Inventory Routing in an Automated Teller Machine Network
Roel G. van Anholt and Iris F.A. Vis

15:30 – 16:00 The Use of Telemetry to Improve Routing Costs
Ann Melissa Campbell and Amit Verma

Session Mo.3.b: Network Models for Humanitarian Logistics

DELOS B

Chair: *Tadashi Yamada, Kyoto University*

14:30 – 15:00 Flow-based Mathematical Formulation and Strengthening Cuts for the Cumulative CVRP
Sandra Ulrich Ngueveu and Mathieu Lacroix

15:00 – 15:30 Exact and Heuristics Strategies for Solving the Generalized Vehicle Routing Problem
H. Murat Afsar, Christian Prins and Andréa Cynthia Santos

15:30 – 16:00 Designing Supply Chain–Transport Supernetworks within the Framework of MPEC
Tadashi Yamada, Yuki Nakamura and Eiichi Taniguchi

Session Mo.3.c: Maritime Logistics I

HORIZON

Chair: *Marielle Christiansen, Norwegian University of Science and Technology*

14:30 – 15:00 A Hybrid Approach for Loading Liquid Bulk Vessels
Rowan Van Schaeren, Wout Dullaert, Birger Raa and Pierre Schaus

15:00 – 15:30 Ship Scheduling with Time-Varying Draft
Elena Kelareva, Philip Kilby, Sylvie Thiébaux and Mark Wallace

15:30 – 16:00 Branch-and-Price for Creating an Annual Delivery Program of Multi-Product Liquefied Natural Gas
Jørgen Glomvik Rakke, Henrik Andersson, Marielle Christiansen and Guy Desaulniers

Monday, 16:30 – 18:00

Session Mo.4.a: Network Design I

DELOS A

Chair: *Tolga Bektaş, University of Southampton*

16:30 – 17:00 Designing Service Networks in Liner Shipping
Judith Mulder and Rommert Dekker

17:00 – 17:30 A Hybrid Evolutionary Algorithm for the Fixed-Charge Capacitated Multicommodity Network Design Problem
Dimitris Paraskevopoulos, Tolga Bektaş, Chris N. Potts and Teodor Gabriel Crainic

17:30 – 18:00 The Congested Multicommodity Network Design Problem
Dimitris Paraskevopoulos, Sinan Gürel and Tolga Bektaş

Session Mo.4.b: Dial-a-Ride Routing

DELOS B

Chair: *Stefan Irnich, Johannes Gutenberg University Mainz*

16:30 – 17:00 The Dial-a-Ride Problem with Split Requests and Profits
Sophie N. Parragh, Bernardo Almada-Lobo and Jorge Pinho de Sousa

17:00 – 17:30 Hybrid Variable Neighborhood Search for the Dial-a-Ride Problem
Verena Schmid and Sophie N. Parragh

17:30 – 18:00 Efficient Handling of Ride-Time Constraints in Column Generation Subproblems for the Dial-a-Ride Problem
Timo Gschwind and Stefan Irnich

Session Mo.4.c: Stochastic Routing II

HORIZON

Chair: *Michel Gendreau, École Polytechnique de Montréal and CIRRELT*

16:30 – 17:00 A Stochastic Inventory Routing Problem for Infectious Medical Waste Collection
Pamela C. Nolz, Nabil Absi and Dominique Feillet

17:00 – 17:30 Real-World Patient Transportation
Ulrike Ritzinger, Jakob Puchinger, Christian Rudloff and Richard F. Hartl

17:30 – 18:00 Vehicle Routing with Soft Time Windows and Stochastic Travel Times: A Column Generation and Branch-and-Price Solution Approach
Duygu Taş, Michel Gendreau, Nico P. Dellaert, Tom van Woensel and A.G. de Kok

Tuesday, 09:00 – 10:30

Session Tu.1.a: Multi-Period Routing

DELOS A

Chair: *Claudia Archetti, University of Brescia*

09:00 – 09:30 A Column Generation Algorithm to Solve a Synchronized Log-Truck Scheduling Problem

Rix Greg, Louis-Martin Rousseau and Gilles Pesant

09:30 – 10:00 Collaborative Template-based Tabu Search and Branch-and-Cut Methods for the Consistent Vehicle Routing Problem

Panagiotis P. Repoussis, Chrysanthos E. Gounaris, Foteini Stavropoulou, Christos D. Tarantilis and Christodoulos A. Floudas

10:00 – 10:30 Free Newspaper Delivery Optimisation

Claudia Archetti, Karl F. Doerner and Fabien Tricoire

Session Tu.1.b: Maritime Logistics II

DELOS B

Chair: *Rommert Dekker, Erasmus University Rotterdam*

09:00 – 09:30 Modeling the Maritime Fleet Size and Mix Problem: A Case Study

Giovanni Pantuso, Kjetil Fagerholt and Stein W. Wallace

09:30 – 10:00 A Bi-Level Modeling Approach Capturing Interactions between Shippers and Carriers

Hyangsook Lee, Maria Boile and Sotirios Theofanis

10:00 – 10:30 Optimizing Recovery Actions and Buffer Times in Liner Shipping Networks

Judith Mulder, Mehdi Sharifyazdi and Rommert Dekker

Session Tu.1.c: Vehicle Routing II

HORIZON

Chair: *Ulrich Derigs, University of Cologne*

09:00 – 09:30 Constraint Violation in Real-World Vehicle Routing

Matteo Salani, Lorenzo Ruinelli and Luca Maria Gambardella

09:30 – 10:00 Milk Collection in Western Norway Using Trucks and Trailers

Arild Hoff

10:00 – 10:30 On a Multi-Trip Tractor and Trailer Vehicle Routing Problem with Driver Regulations

Ulrich Vogel and Ulrich Derigs

Tuesday, 11:00 – 12:30

Session Tu.2.a: Arc Routing I

DELOS A

Chair: *Ángel Corberán, University of Valencia*

11:00 – 11:30 Analysis of Pricing Problem Relaxations for the Capacitated Arc Routing Problem

Claudia Bode and Stefan Irnich

11:30 – 12:00 Profitable Mixed Capacitated Arc Routing and Related Problems

Enrique Benavent, Ángel Corberán, Luis Gouveia, Maria Cândida Mourão and Leonor Santiago Pinto

12:00 – 12:30 A Branch-and-Cut Algorithm for the Team Orienteering Arc Routing Problem

Claudia Archetti, Ángel Corberán, Isaac Plana, Maria Grazia Speranza and José María Sanchis

Session Tu.2.b: City Logistics II

DELOS B

Chair: *Angélica Lozano, National Autonomous University of Mexico*

11:00 – 11:30 Impact of Time-Dependent Travel Times on Routing in City Logistics

Jan Fabian Ehmke, Carsten Tilger and Dirk Christian Mattfeld

11:30 – 12:00 Optimization of a Shared Passengers and Goods Urban Transportation Network

Renaud Masson, Anna Trentini, Fabien Lehuédé, Olivier Péton, Houda Tlahig and Nicolas Malhéné

12:00 – 12:30 Impacts of Time Windows Restrictions on Urban Freight Corridors: Mexico City Case

Liliana Lyons, Angélica Lozano, Francisco Granados, Alejandro Guzmán and Juan Pablo Antún

Session Tu.2.c: Sustainable Routing

HORIZON

Chair: *Gilbert Laporte, HEC Montréal and CIRRELT*

11:00 – 11:30 A Real-life Application of the Dynamic Waste Collection Vehicle Routing Problem with Time Windows

Allan Larsen, Kristian Milo Hauge, Allan Olsen and Stefan Ropke

11:30 – 12:00 Modeling and Solving the Time Dependent Vehicle Routing and Scheduling Problem with Environmental Considerations

Konstantinos G. Zografos and Konstantinos N. Androutsopoulos

12:00 – 12:30 The Time-Dependent Pollution Routing Problem

Anna Franceschetti, Tom van Woensel, Dorothée Honhon, Tolga Bektaş and Gilbert Laporte

Tuesday, 14:30 – 16:00

Session Tu.3.a: Two-Echelon Routing

DELOS A

Chair: *Roberto Tadei, Politecnico di Torino*

14:30 – 15:00 A Branch-and-Cut Algorithm for the Two-Echelon Location-Routing Problem
Viet Phuong Nguyen, Christian Prins, Caroline Prodhon and Juan Guillermo Villegas

15:00 – 15:30 Solving the Two-Echelon Capacitated Vehicle Routing Problem to Optimality
Aristide Mingozzi, Roberto Roberti, Roberto Wolfler Calvo and Roberto Baldacci

15:30 – 16:00 A Reactive GRASP with Path Relinking for the Two-Echelon Vehicle Routing Problem
Teodor Gabriel Crainic, Simona Mancini, Roberto Tadei and Guido Perboli

Session Tu.3.b: Vehicle Routing III

DELOS B

Chair: *Fabien Tricoire, University of New South Wales*

14:30 – 15:00 Operational Transportation Planning of Freight Forwarding Companies in Carrier Coalitions
Xin Wang, Herbert Kopfer and Michel Gendreau

15:00 – 15:30 Joint Demand Management and Vehicle Routing in E-fulfillment
Christine Currie, Richard Eglese and Arne K. Strauss

15:30 – 16:00 An Adaptive Metaheuristic Framework for Vehicle Routing Problems with Fixed Fleet Size
Stefanie Kritzinger, Karl F. Doerner, Richard F. Hartl and Fabien Tricoire

Session Tu.3.c: Routing and Scheduling I

HORIZON

Chair: *Jacques Desrosiers, HEC Montréal and GERAD*

14:30 – 15:00 Logistics of Clinical Testing: A Prioritized Bicriteria Heuristic for Collection for Processing Problem
F. Sibel Salman, Eda Yücel, E. Lerzan Örmeci and Esma S. Gel

15:00 – 15:30 Vehicle Routing with Time Windows Considering Driving and Working Hour Regulations
Maryam Steadie Seifi, Said Dabia, Tom van Woensel and Nico P. Dellaert

15:30 – 16:00 Workforce Routing and Scheduling for Maintenance Operations in Electricity Networks
Frank Meisel and Asvin Goel

Tuesday, 16:30 – 18:00

Session Tu.4.a: Arc Routing II

DELOS A

Chair: *Bruce Golden, University of Maryland*

16:30 – 17:00 The Road Marking Problem with Refill Operations

Maria Angélica Salazar-Aguilar, André Langevin and Gilbert Laporte

17:00 – 17:30 A Matheuristic for the Team Orienteering Arc Routing Problem

Ángel Corberán, Isaac Plana, José María Sanchis, Maria Grazia Speranza and Claudia Archetti

17:30 – 18:00 The Downhill Plowing Problem with Multiple Plows

Benjamin Dussault, Bruce Golden and Edward Wasil

Session Tu.4.b: Home Health Care Logistics

DELOS B

Chair: *Mike Hewitt, Rochester Institute of Technology*

16:30 – 17:00 Routing of Home Care Staff Members with Synchronization Requirements

Dorota Slawa Mankowska, Christian Bierwirth and Frank Meisel

17:00 – 17:30 Medium Term Planning for Home Health Care Services

Andrea Trautsamwieser and Patrick Hirsch

17:30 – 18:00 Estimating the Cost of Continuity of Care in Home Health Care Delivery

Mike Hewitt and Maciek Nowak

Session Tu.4.c: Routing and Scheduling II

HORIZON

Chair: *Guy Desaulniers, École Polytechnique de Montréal and GERAD*

16:30 – 17:00 A Branch-and-Cut Algorithm for the Single Truck and Trailer Routing Problem with Satellite Depots

José M. Belenguer, Antonio Martínez, Christian Prins, Caroline Prodhon, Juan G. Villegas and Enrique Benavent

17:00 – 17:30 Stabilized Dynamic Constraint Aggregation for Solving Set Partitioning Problems

Pascal Benchimol, Guy Desaulniers and Jacques Desrosiers

17:30 – 18:00 A Branch-Price-and-Cut Algorithm for the Workover Rig Routing Problem

Guy Desaulniers, Glaydston Mattos Ribeiro and Jacques Desrosiers

Thursday, 09:00 – 10:30

Session Th.1.a: Traveling Salesman Problem Variants

DELOS A

Chair: *Renata Mansini, University of Brescia*

09:00 – 09:30 The Bicycle Repositioning Problem with Demand Intervals
Güneş Erdoğan, Gilbert Laporte and Roberto Wolfler Calvo

09:30 – 10:00 The Clustered Orienteering Problem
Enrico Angelelli, Claudia Archetti and Michele Vindigni

10:00 – 10:30 The Capacitated Traveling Purchaser Problem with Total Quantity Discount
Renata Mansini and Daniele Manerba

Session Th.1.b: Container Logistics

DELOS B

Chair: *Der-Horng Lee, National University of Singapore*

09:00 – 09:30 Real-Time Container Storage Location Assignment at a Seaport Container
Transshipment Terminal Part II
Matthew E.H. Petering

09:30 – 10:00 An Optimization Model for Container Distribution with Inventory and Time
Constraints
*Kristina Sharypova, Teodor Gabriel Crainic, Tom van Woensel and Jan
Fransoo*

10:00 – 10:30 Tactical Feeder Scheduling Problem in a Container Transshipment Hub
Der-Horng Lee and Jian Gang Jin

Session Th.1.c: Routing I

HORIZON

Chair: *Giovanni Righini, University of Milan*

09:00 – 09:30 An Iterated Local Search to solve the Node, Edge and Arc Routing Problem
Mauro Dell'Amico, José Carlos Díaz Díaz, Geir Hasle and Manuel Iori

09:30 – 10:00 Integrating Return Flows in Warehouse Order Picking
Susanne Wruck, Kees Jan Roodbergen, Iris F.A. Vis and Jaap Boter

10:00 – 10:30 Optimizing Waste Collection: A Branch-and-Cut-and-Price Algorithm
Alberto Ceselli, Giovanni Righini and Emanuele Tresoldi

Thursday, 11:00 – 12:30

Session Th.2.a: Transportation Risk

DELOS A

Chair: *Irina Gribkovskaia, Molde University College*

11:00 – 11:30 A Lagrangean Decomposition for Tunnel Interdiction in Hazmat Transportation

Edoardo Amaldi, Maurizio Bruglieri, Roberto Maja and Alessandro Laurita

11:30 – 12:00 Risk based Routing and Scheduling of Hazardous Material in Urban Areas

Rojee Pradhananga, Eiichi Taniguchi and Tadashi Yamada

12:00 – 12:30 Passenger and Pilot Risk Minimization in Offshore Helicopter Transportation

Fubin Qian, Irina Gribkovskaia, Gilbert Laporte and Øyvind Halskau sr.

Session Th.2.b: Packing Logistics

DELOS B

Chair: *Guido Perboli, Politecnico di Torino*

11:00 – 11:30 An Exact Algorithm for Bin Packing Problems with Item Fragmentation

Marco Casazza and Alberto Ceselli

11:30 – 12:00 The Generalized Bin Packing Problem: Models and Bounds

Teodor Gabriel Crainic, Roberto Tadei, Guido Perboli and Mauro Maria Baldi

12:00 – 12:30 A Stochastic Bin Packing Model for Logistical Capacity Planning

Teodor Gabriel Crainic, Guido Perboli, Jean-Paul Watson, David L. Woodruff and Walter Rei

Session Th.2.c: Dynamic Routing

HORIZON

Chair: *Alan Erera, Georgia Institute of Technology*

11:00 – 11:30 Heuristics for Stochastic and Dynamic Maritime Pickup and Delivery Problems

Gregorio Tirado, Lars Magnus Hvattum, Kjetil Fagerholt and Jean-François Cordeau

11:30 – 12:00 Dynamic Tracking and Rerouting Strategies with Real-Time Traffic Information

Jesús-Arturo Orozco and Jaume Barcelo

12:00 – 12:30 Improved Tour Determination for the Dynamic Traveling Salesman Problem

Taesu Cheong, Alan Erera and Chelsea C. White III

Thursday, 14:00 – 15:30

Session Th.3.a: Time-Dependent Routing

DELOS A

Chair: *Richard Eglese, Lancaster University*

14:00 – 14:30 A Note on the Ichoua *et al.* (2003) Travel Time Model
Gianpaolo Ghiani and Emanuela Guerriero

14:30 – 15:00 A Tabu Search Approach for Daily Scheduling of Home Health Care Services using Multi-Modal Transport
Klaus-Dieter Rest and Patrick Hirsch

15:00 – 15:30 Variable Neighborhood Search for the Time-Dependent Prize-Collecting Arc Routing Problem
Sanne Wøhlk, Daniel Black and Richard Eglese

Session Th.3.b: Scheduling

DELOS B

Chair: *L. Douglas Smith, University of Missouri-St. Louis*

14:00 – 14:30 Refuel Decisions and Driver Time Management in Long-Haul Freight Transportation
Alexandra Hartmann, Teresa Melo, Thomas Bousonville and Herbert Kopfer

14:30 – 15:00 The Influence of Accurate Travel Times on a Home Health Care Scheduling Problem
Matthias Prandtstetter, Andrea Rendl and Jakob Puchinger

15:00 – 15:30 Scheduling Transportation and Logistics Events in Staged Queues
L. Douglas Smith, Robert M. Nauss, Jan Fabian Ehmke, Florian Bahr and Dirk Christian Mattfeld

Session Th.3.c: Inventory Routing II

HORIZON

Chair: *Maria Grazia Speranza, University of Brescia*

14:00 – 14:30 Hybrid Heuristic for the Inventory Location-Routing Problem with Deterministic Demand
William J. Guerrero, Caroline Prodhon, Nubia Velasco and Ciro Alberto Amaya

14:30 – 15:00 Designing Nested Routes for Cyclic Inventory Routing Problems
Birger Raa

15:00 – 15:30 Exact Solution of an IRP with Multiple Vehicles
Claudia Archetti, Nicola Bianchessi, Stefan Irnich and Maria Grazia Speranza

Thursday, 16:00 – 18:00

Session Th.4.a: Production – Distribution

DELOS A

Chair: *Jean-François Cordeau, HEC Montréal and CIRRELT*

16:00 – 16:30 Multi-Period Vehicle Loading with Stochastic Release Dates
Yasemin Arda, Yves Crama, David Kronus, Thierry Pironet and Pascal Van Hentenryck

16:30 – 17:00 Divergent Supply Chain in an Oil Company - Decoupled and Integrated Planning
Mario Guajardo, Martin Kylinger and Mikael Rönnqvist

17:00 – 17:30 Optimization-Based Adaptive Large Neighborhood Search for the Production Routing Problem
Yossiri Adulyasak, Jean-François Cordeau and Raf Jans

17:30 – 18:00 –

Session Th.4.b: Freight Transportation Networks

DELOS B

Chair: *Bernard Gendron, Université de Montréal and CIRRELT*

16:00 – 16:30 Robust Empty Repositioning in Large-scale Freight Consolidation Networks
Antonio Carbajal, Martin Savelsbergh and Alan Erera

16:30 – 17:00 Transport Mode Selection for Hazardous Materials
Vedat Verter, Morteza Bagheri and Manish Verma

17:00 – 17:30 Hazmat Transportation by Game Theory
Lucio Bianco, Massimiliano Caramia, Stefano Giordani and Veronica Piccialli

17:30 – 18:00 A Lagrangian-Based Branch-and-Bound Algorithm for the Two-Level Uncapacitated Facility Location Problem
Paul-Virak Khuong, Bernard Gendron and Frédéric Semet

Session Th.4.c: Vehicle Routing IV

HORIZON

Chair: *Roberto Wolfler Calvo, Université Paris 13*

16:00 – 16:30 The Distance-Constrained Vehicle Purchaser Problem
Nicola Bianchessi, Maria Grazia Speranza and Renata Mansini

16:30 – 17:00 Incomplete Service and Split Deliveries in a Routing Problem with Profits
Claudia Archetti, Alain Hertz, Maria Grazia Speranza and Nicola Bianchessi

17:00 – 17:30 The Static Multi Vehicles Rebalancing Problem
Daniel Chemla, Frédéric Meunier and Roberto Wolfler Calvo

17:30 – 18:00 –

Friday, 09:00 – 10:30

Session Fr.1.a: Vehicle Routing V

DELOS A

Chair: *Christian Prins, Université de Technologie de Troyes*

09:00 – 09:30 Load Balancing for the Skill Vehicle Routing Problem
Silvia Schwarze and Stefan Voss

09:30 – 10:00 The Bi-Objective Multi-Vehicle Covering Tour Problem: Formulation and Lower Bound
Boadu Mensah Sarpong, Christian Artigues and Nicolas Jozefowicz

10:00 – 10:30 Towards a General Heuristic for Multi-Attribute Vehicle Routing Problems
Thibaut Vidal, Teodor Gabriel Crainic, Michel Gendreau and Christian Prins

Session Fr.1.b: Maritime Transportation I

DELOS B

Chair: *Harilaos Psaraftis, National Technical University of Athens*

09:00 – 09:30 *A Fleet Deployment Problem in Liner Shipping*
Henrik Andersson, Kjetil Fagerholt and Kirsti Hobbesland

09:30 – 10:00 Reducing Emissions in Offshore Supply Vessel Planning by Speed Optimization
Ellen Karoline Norlund and Irina Gribkovskaia

10:00 – 10:30 A Ship Pickup and Delivery Model with Multiple Commodities, Variable Speeds, Cargo Inventory Costs and Freight Rates
Harilaos N. Psaraftis

Session Fr.1.c: Network Design II

HORIZON

Chair: *Nicoletta Ricciardi, Sapienza University of Rome*

09:00 – 09:30 A CAT Metaheuristic for the Design of Activity-Based Supply Chain Networks Under Uncertainty
Marc-André Carle and Alain Martel

09:30 – 10:00 Incremental Network Design with Shortest Paths
Matthew Baxter, Tarek Elgindy, Andreas Ernst, Thomas Kalinowski and Martin Savelsbergh

10:00 – 10:30 Modelling Dry-Port-based Freight Distribution through Service Network Design
Teodor Gabriel Crainic, Paolo Dell'Olmo, Nicoletta Ricciardi and Antonino Scalambro

Friday, 11:00 – 12:30

Session Fr.2.a: Maritime Transportation II

DELOS A

Chair: *Mikael Rönnqvist, Université Laval*

11:00 – 11:30 Dynamic Vessel Navigation
Irina S. Dolinskaya and Robert L. Smith

11:30 – 12:00 Large Scale Robust Optimization of Bulk Seaport Operations
Nitish Umang and Michel Bierlaire

12:00 – 12:30 Vessel Routing and Scheduling under Uncertainty in the Liquefied Natural Gas Business
Elin Espeland Halvorsen-Weare, Kjetil Fagerholt and Mikael Rönnqvist

Session Fr.2.b: Emergency Logistics

DELOS B

Chair: *Alain Martel, Université Laval and CIRRELT*

11:00 – 11:30 A Bilevel Partial Interdiction Problem With Capacitated Facilities and Demand Outsourcing
Sema Şengül Akça, Necati Aras and Deniz Aksen

11:30 – 12:00 Stochastic Optimization for Warehouse Location for Flood Disaster Relief Preparation in Brazil
Adriana Leiras, Irineu de Brito Junior and Hugo Yoshizaki

12:00 – 12:30 Designing Emergency Supply Networks for Responsive Disaster Support
Walid Klibi, Soumia Ichoua and Alain Martel

Session Fr.2.c: Dynamic Vehicle Routing

HORIZON

Chair: *Cristián Cortés, University of Chile*

11:00 – 11:30 On the Dynamic Technician Routing and Scheduling Problem
Victor Pillac, Christelle Guéret and Andrés L. Medaglia

11:30 – 12:00 Rollout Algorithms with Restocking for Dynamic Vehicle Routing with Stochastic Demand and Duration Limits
Justin C. Goodson, Barrett W. Thomas and Jeffrey W. Ohlmann

12:00 – 12:30 Dynamic Column Generation Approach for Space Covering and Time-Space Covering Traveling Technician Problem
Cristián E. Cortés, Michel Gendreau, José Rojas, Louis-Martin Rousseau and Andrés Weintraub

Friday, 14:30 – 16:00

Session Fr.3.a: Routing with Loading Constraints

DELOS A

Chair: *Manuel Iori, University of Modena and Reggio Emilia*

14:30 – 15:00 An Exact Algorithm for the Double Traveling Salesman Problem with Multiple Stacks

Alberto Ceselli and Roberto Wolfler Calvo

15:00 – 15:30 A Strategic Oscillation Heuristic for the Double Traveling Salesman Problem with Multiple Stacks

Sebastián Urrutia, Anolan Milanés and Arne Løkketangen

15:30 – 16:00 A Rich Vehicle Routing Problem with Three-Dimensional Loading Aspects

Emmanouil E. Zachariadis, Christos D. Tarantilis and Chris T. Kiranoudis

Session Fr.3.b: Routing II

DELOS B

Chair: *Sanne Wøhlk, Aarhus University*

14:30 – 15:00 Column Generation for the Multiple Vehicle Covering Tour Problem

Nicolas Jozefowicz

15:00 – 15:30 An Aggregate Multi-Step Model of the Urban Freight Delivery Tours

Agostino Nuzzolo and Antonio Comi

15:30 – 16:00 Lower Bound for the Node, Edge and Arc Routing Problem

Lukas Bach, Geir Hasle and Sanne Wøhlk

Session Fr.3.c: Network Design and Uncertainty

HORIZON

Chair: *Stein W. Wallace, Lancaster University*

14:30 – 15:00 The Impact of Uncertainty on Closed-Loop Supply Chains

Beste Kucukyazici Verter, Wenyi Chen and Vedat Verter

15:00 – 15:30 Demand Uncertainty in Network Design Problems

Teodor Gabriel Crainic, Walter Rei and Mike Hewitt

15:30 – 16:00 Multi-Commodity Stochastic Network Design: Dynamic Formulation without Conservation-of-Flow on the Design Variables

Stein W. Wallace and Xin Wang

Friday, 16:30 – 18:00

Session Fr.4.a: Location-Routing

DELOS A

Chair: *Louis-Martin Rousseau, École Polytechnique de Montréal and CIRRELT*

16:30 – 17:00 A Comparison of Three Metaheuristic Algorithms for the Capacitated Location-Routing Problem

John W. Escobar, Rodrigo Linfati, Paolo Toth and Maria Gulnara Baldoquin

17:00 – 17:30 Solving Network Design and Routing Problems for Urban Freight Distribution

Paolo Gianessi, Laurent Alfandari, Lucas Létocart and Roberto Wolfler Calvo

17:30 – 18:00 Location-Routing Problems with Pickup and Delivery and Time Windows constraints

Thomas Capelle, Cristián E. Cortés, Michel Gendreau, Louis-Martin Rousseau and Pablo A. Rey

Session Fr.4.b: Supply Chain Logistics

DELOS B

Chair: *Barrett Thomas, University of Iowa*

16:30 – 17:00 Solving the Raw Materials Reception Problem using Revenue Management Principles: An Application to a Portuguese Pulp Mill

Mikael Rönnqvist, Sophie D'Amours, Andrés Weintraub, João Gonçalves, Jose G. Borges and Alexandra F. Marques

17:00 – 17:30 A Stockyard Planning Problem

Natashia Boland, Damon Gulczynski and Martin Savelsbergh

17:30 – 18:00 Coordinated Logistics for Sugarcane Harvests in Brazil

Barrett W. Thomas, Kamal Lamsal and Philip C. Jones

Social Program

Welcome Reception

SUNDAY

Starts at: 20:00

Place: Lobby Veranda

Features: Drinks and light snacks

Excursion to Delos

WEDNESDAY

Timeline:

07:45 Departure from *Royal Myconian Resort*

08:20 Arrival at Chora of Mykonos, rendezvous with our guides and walk towards the old harbor

08:40 Embarkation

09:00 Ferry departure

09:25 Arrival at Delos and disembarkation

09:30 Start of the guided tour

13:20 End of visit and embarkation

13:30 Ferry departure

14:00 Arrival at Chora of Mykonos, disembarkation and walk to the buses

14:15 Departure from Chora of Mykonos

14:45 Arrival at *Royal Myconian Resort*

Workshop Dinner and Party

THURSDAY

Starts at: 20:30

Place: Horizon room and terrace

Features: Drink reception

Full course dinner

ODYSSEUS 2015 candidacies and vote

Music and dancing

Farewell Drinks

FRIDAY

Starts at: 20:00

Place: Sunset Veranda

Features: Drinks and light snacks

ODYSSEUS



2012



Farewell!