

Detailed scientific program VeRoLog 2014 Oslo 22-25 June 2014

Chair:

For all parallel sessions, the last speaker is appointed to be chair. If the last speaker does not turn up for the session, the second last speaker will be the chair.

The role of the chair is to open and close the session, be a strict time keeper, and ensure that all speakers are present with their presentations transferred to the local PC before the start of the session. If there are any technical difficulties, one of the members of the organization committee should be contacted. An overview of where to find a committee member at all times during the conference will be available.

In case a speaker does not turn up for her/his session, use the original presentation times to allow for session hopping.

Each presentation should last for maximum 20 minutes, leaving 5 minutes for questions.

Rooms: A1: Auditorium 1 A2: Auditorium 2 UR1: Undervisningsrom 1 UR2: Undervisningsrom 2 UR3: Undervisningsrom 3 GR4: Grupperom 4 GR7: Grupperom 7 Both auditoriums are located at the ground floor All other rooms are located at the second floor

09:00 - 10:15: Opening session and Plenary session 1

A1: Opening session Chair: Geir Hasle

A1: Plenary session 1 Chair: Marielle Christiansen

Rommert Dekker	Robust planning of transportation systems	Rommert Dekker

10:45 - 12:00: Parallel sessions

A2 MON 10:45-12:00: Dynamic and Stochastic Problems 1

Chair: Alexander Kleff

Harilaos Psaraftis	Dynamic vehicle routing problems: Three decades and counting	Harilaos Psaraftis, Christos Kontovas and Min Wen
Sofoclis Zambirinis	The Disrupted Vehicle Routing Problem with Vehicle Breakdown	Sofoclis Zambirinis and Richard Eglese
Alexander Kleff	Estimating times of arrival and reacting to changing scenarios for a tour in progress	Alexander Kleff

UR1 MON 10:45-12:00: TSP Variants Chair: Stefan Irnich

Tal Raviv	The minimum complete cycle problem	Tom Cherchy and Tal Raviv
Luis Gouveia	Modeling and Solving the One-to-One Multi- Commodity Pickup and Delivery Traveling Salesman Problem	Luis Gouveia and Mario Ruthmair
Stefan Irnich	Efficient Dynamic Programming for the Minimum Tour Duration Problem	Christian Tilk and Stefan Irnich

UR2 MON 10:45-12:00: Railway Applications

Chair: Carlo Mannino

Olesya Lebedeva	A large-scale fleet management problem	Alexander Belenky, Gennady Fedin, Olesya Lebedeva and Alexandra Yunusova
Paweł Hanczar	The tactical planning model for rail freight transportation with empty cars movements and periodic inspections: a case study	Paweł Hanczar
Carlo Mannino	Optimal train dispatching in Norway	Carlo Mannino and Leonardo Lamorgese
UR3 MON 10:45-12 Chair: Elin E. Halvor	:00: Bi-objective Problems sen-Weare	
José A. Iranzo	A hybrid evolutionary algorithm for the biobjective capacitated m-ring star problem	Herminia Calvete, Carmen Galé and José A. Iranzo
Sandra Huber	Incorporating preferences of a decision maker in a bi- objective Inventory Routing Problem	Sandra Huber, Martin Josef Geiger and Marc Sevaux
Elin E. Halvorsen- Weare	A bi-objective mixed capacitated general routing problem	Elin E. Halvorsen-Weare and Martin Savelsbergh

GR4 MON 10:45-12:00: Multi-period VRP Chair: Marlin W. Ulmer

Burcin Bozkaya	A Periodic VRP Model for Optimizing Courier Collection Operations	Burcin Bozkaya, Fusun Ulengin, Bora Cekyay, Ozgur Kabak, Ozay Ozaydin, Peral Toktas Palut and Sule Onsel
Alexander Shchegryaev	Problem of Time Inconsistency in Multi-period Vehicle Routing Problems	Alexander Shchegryaev and Victor V. Zakharov
Marlin W. Ulmer	Anticipatory Optimization for a Dynamic Multi-Period Routing Problem	Marlin W. Ulmer and Dirk C. Mattfeld
GR7 MON 10:45-12:00: Shortest Path Problems Chair: Dag Kjenstad		

Tobia Calogiuri	The Time-dependent Quickest Path Problem: Properties and Bounds	Tobia Calogiuri, Gianpaolo Ghiani and Emanuela Guerriero
Dag Kjenstad	Intermodal journey planning with real-time events	Dag Kjenstad and Geir Hasle

13:45 - 15:00: Parallel sessions

A2 MON 13:45-15:00: Dynamic and stochastic problems 2 Chair: Magdalene Marinaki

Rune Larsen	A framework for solving stochastic vehicle routing problems in a dynamic setting using a deterministic solver	Rune Larsen and Marco Pranzo
Christian Prins	Metaheuristics for the robust vehicle routing problem with discrete scenarios	Elyn Solano Charris, Christian Prins and Andréa Cynthia Santos
Magdalene Marinaki	An Evolutionary – GRASP Algorithm with Path Relinking for the Vehicle Routing Problem with Stochastic Demands	Magdalene Marinaki and Yannis Marinakis

UR1 MON 13:45-15:00: Capacitated vehicle routing problem

Chair: Demetrio Laganà

Farah Zeghal Mansour	A Branch-and-Price approach for the Capacitated Vehicle Routing Problem	Mohamed Haouari and Farah Zeghal Mansour
Kenan Karagul	Physics-Inspired Optimization Algorithm for Obtaining Initial Routes of Capacitated Vehicle Routing Problem	Kenan Karagul, Sezai Tokat and Erdal Aydemir
Demetrio Laganà	An Adaptive Variable Neighborhood Search Algorithm for the Capacitated Vehicle Routing Problem	Demetrio Lagana, Roberto Musmanno and Daniele Vigo

UR2 MON 13:45-15:00: Air Traffic Management Chair: Nina Hulleberg

Tomas Eric Nordlander	Integrated scheduling and routing at an airport	Patrick Schittekat, Dag Kjenstad, Carlo Mannino, Tomas Eric Nordlander and Morten Smedsrud
Marius Sandvik	Conflict resolution between flights at airports using network simplex	Marius Sandvik
Nina Hulleberg	Rescheduling airside operations of an airport for optimality and stability	Nina Hulleberg
UR3 MON 13:45-1 Chair: Erwin Pesch	5:00: Arc routing	Thais Ávila, Ángel Corberán

José María Sanchis	On the Distance-Constrained Generalized Directed Rural Postman Problem	Isaac Plana and José María Sanchis
Ana Catarina Nunes	Non-overlapping routes for the mixed capacitated arc routing problem	Miguel Constantino, Luis Gouveia, Maria Cândida Mourão and Ana Catarina Nunes
Erwin Pesch	The Windy Rural Postman Problem with a Time- Dependent Zigzag Option	Jenny Nossack, Bruce Golden, Erwin Pesch and Rui Zhang

GR4 MON 13:45-15:00: Routing with Clustering and Balancing Chair: Nitin Ahuja

Dimitrios Gkortsilas	Eco-friendly Vehicle Routing via Balanced and Compact Clustering	Dimitrios Gkortsilas and Christos Zaroliagis
Ana D. López- Sánchez	Cost allocation for a Balanced Real-World Open Vehicle Routing Problem	Ana D. López-Sánchez, Diego V. Borrero-Molina, Alfredo G. Hernández-Díaz, Miguel A. Hinojosa and Daniele Vigo
Nitin Ahuja	A Cluster-First-Route-Second-Approach for Solving Rich Vehicle Routing Problems in Urban and Suburban Areas	Nitin Ahuja, Andreas Wagner, Matthias Bender, Christian Schulz and Peter Sanders
GR7 MON 13:45-15:00: Green Vehicle Routing Chair: Christos Kontovas		
Ulrich Breunig	A simple but effective LNS for the 2-Echelon VRP	Ulrich Breunig, Verena Schmid, Richard F. Hartl and Thibaut Vidal
Jose A Montoya	A simple hybrid heuristic for the Green Vehicle Routing Problem	Jose A Montoya, Christelle Guéret, Jorge E Mendoza and Juan G Villegas
Christos Kontovas	The Green Ship Routing and Scheduling Problem (GSRSP)	Christos Kontovas

15:30-16:45: Parallel sessions

A2 MON 15:30-16:45: Dynamic and Stochastic Problems 3 Chair: Alan King

Thierry Pironet	Multi-period vehicle assignment problem with stochastic load availability	Thierry Pironet and Yves Crama
Pradip Kundu	Solid Transportation Problem with Rough Cost Parameters	Pradip Kundu, Samarjit Kar and Manoranjan Maiti
Alan King	Modeling fashion inventory management in a multi- store setting	Alan King, Miao He and Robin Lougee

UR1 MON 15:30-16:45: VRP Variants 1 Chair: Juan-Jose Salazar-González

Claudio Gambella	Exact and Heuristic Solutions of the Carrier-Vehicle Travelling Salesman Problem	Claudio Gambella, Daniele Vigo and Andrea Lodi
Junmin Yi	1L-CVRP Originated from Logistics Practice	Junmin Yi and Yihui Qiu
Juan-Jose Salazar- González	The single vehicle routing problem with variable capacity	Francois Louveaux and Juan-Jose Salazar-González

UR2 MON 15:30-16:45: Barge Transportation

Chair: Tony Wauters

Ioana Bilegan	A Revenue Management Approach for Barge Transportation Service Network Design	Ioana Bilegan and Teodor Gabriel Crainic
Rob Zuidwijk	Barge Port-Hinterland Container Network Design	Panagiotis Ypsilantis, Rob Zuidwijk and Morteza Pourakbar
Tony Wauters	Barge Convoy Voyage Optimization	Tony Wauters, Jan Christiaens and Greet Vanden Berghe

UR3 MON 15:30-16:45: Capacitated General Routing Problems Chair: Ingvild Lyckander

Lukas Bach	A Branch-and-Cut-and-Price Algorithm for the Mixed Capacitated General Routing Problem	Lukas Bach, Jens Lysgaard and Sanne Wøhlk
Geir Hasle	An Adaptive Iterated Local Search for the Mixed Capacitated General Routing Problem	Mauro Dell'Amico, Jose Carlos Diaz Diaz, Geir Hasle and Manuel Iori
Ingvild Lyckander	Metaheuristics for multi-objective Mixed Capacitated General Routing Problems	Ingvild Lyckander, Markus Grasmair, Elin Halvorsen-Weare and Geir Hasle

GR4 MON 15:30-16:45: Waste Management Chair: Maria João Cortinhal

Onur Yilmaz	A literature review on reverse logistics of waste electrical and electronic equipment	Onur Yilmaz and Bahadir Gulsun
Iliya Markov	Vehicle Routing for a Complex Waste Collection Problem	lliya Markov, Sacha Varone and Michel Bierlaire
Maria João Cortinhal	Meta-heuristics for residential waste collection problems	Maria João Cortinhal, Maria Cândida Mourão and Ana Catarina Nunes
GR7 MON 15:30-16:45: Maritime Transportation Chair: Trond Johnsen		
Gregorio Tirado	Efficient solution methods for stochastic and dynamic maritime transportation problems	Gregorio Tirado and Lars Magnus Hvattum

Kristian ThunSolving the liner shipping network design problem
using branch-and-priceKristian Thun, Henrik Andersson,
Marielle Christiansen and
Magnus StålhaneTrond JohnsenDecision support for maritime fleet size and mixTrond Johnsen

Tuesday 24 June 2014

09:00 - 10:15: Plenary session 2

A1: Plenary session 2 Chair: Elin E. Halvorsen-Weare

Claudia Archetti	Matheuristics for routing problems	Claudia Archetti
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10:45-12:00: Parallel sessions

A2 TUE 10:45-12:00: Routing with Distance Constraints Chair: Thibaut Vidal

Jens Lysgaard	Optimal vehicle routing with lower and upper bounds on route durations	Jens Lysgaard and Tolga Bektas
Markus Reuther	A Lin-Kernighan Heuristic for the DVRP	Markus Reuther and Ralf Borndoerfer
Thibaut Vidal	On-line traveling salesman with duration and distance considerations	Thibaut Vidal and Patrick Jaillet

UR1 TUE 10:45-12:00: VRP Variants 2 Chair: Efim M. Bronshtein

Nicola Bianchessi	An exact solution approach for the Split Commodities Mixed Routing problem	Nicola Bianchessi, Claudia Archetti and M. Grazia Speranza
Hanne Pollaris	Integrating axle weight restrictions in a two- dimensional vehicle routing problem with sequence based loading	Hanne Pollaris, Kris Braekers, An Caris, Gerrit K. Janssens and Sabine Limbourg
Efim M. Bronshtein	Minimax School Bus Problem	Efim M. Bronshtein and Diana M. Vagapova

UR2 TUE 10:45-12:00: Multiple Compartments Chair: Leandro C. Coelho

Raza Khan	Optimization of Inter-depot Trunking with heterogeneous fleet and Semi-Trailer Swap option	Raza Khan
Tino Henke	An Exact Approach to the Multi-Compartment Vehicle Routing Problem with Flexible Compartment Sizes	Tino Henke and M. Grazia Speranza
Leandro C. Coelho	Classification, models and exact algorithms for multi- compartment delivery problems	Leandro C. Coelho and Gilbert Laporte
UR3 TUE 10:45-12:00: Pickup and Delivery 1 Chair: Thomas Wensing		
Enrique Benavent	The multiple vehicle pickup and delivery problem with LIFO constraints	Enrique Benavent, Mercedes Landete, Enrique Mota and Gregorio Tirado
Julia Funke	A model for a multi-size Hinterland Container Transportation Problem	Julia Funke and Herbert Kopfer
Thomas Wensing	Planning Pickup and Delivery Operations in Finished	Thomas Wensing

GR4 TUE 10:45-12:00: Inventory Routing 1

Chair: Tim Pigden

Pasquale Avella	Cutting planes for Multi-Vehicle Inventory Routing Problems	Pasquale Avella, Maurizio Boccia and Laurence A. Wolsey
Francesca Vocaturo	A heuristic approach to the multiple-product inventory-routing problem	Jean-François Cordeau, Demetrio Laganà, Roberto Musmanno and Francesca Vocaturo
Tim Pigden	A Decision Support System for the Management of Petroleum Distribution	Kostiantyn Kuznietzov, Vasilii Gromov and Tim Pigden

GR7 TUE 10:45-12:00: Speedup Techniques and Parallelism Chair: Bülent Çatay

Vehicle Distribution

Christian F. Schulz	A GPU-based TSP-solver	Christian F. Schulz, Torkel Haufmann and Geir Hasle
Onne Beek	A computational study of efficient Local Search implementations for the Vehicle Routing Problem	Onne Beek, Birger Raa and Wout Dullaert
Bülent Çatay	A parallel matheuristic for solving a class of vehicle routing problems	Umman Mahir Yıldırım and Bülent Çatay

13:45-15:00: Parallel sessions

A2 TUE 13:45-15:00: Routing with Synchronization Constraints Chair: Fabien Lehuédé

Philippe Grangier	An adaptive large neighborhood search for the Two- Echelon Multi-Trip Vehicle Routing Problem with Satellite Synchronization	Philippe Grangier, Michel Gendreau, Fabien Lehuédé and Louis-Martin Rousseau
Sophie N. Parragh	Field Staff Routing and Scheduling	Sophie N. Parragh, Karl F. Doerner and Richard F. Hartl
Fabien Lehuédé	A full truckload routing and scheduling problem with split delivery and resource synchronization	Axel Grimault, Nathalie Bostel and Fabien Lehuédé

UR1 TUE 13:45-15:00: VRP Variants 3 Chair: Gerben Groenendijk

Mouaouia Cherif Bouzid	An Adaptive Large Neighborhood Search Heuristic for the Truck & Trailer Routing Problem	Mouaouia Cherif Bouzid, Hacene Ait Haddadene and Said Salhi	
Sameh Haneyah	Simultaneous Vehicle Routing and Resource Assignment	Sameh Haneyah, Thomas Visser and Leendert Kok	
Gerben Groenendijk	Departure Time Optimization in Vehicle Routing	Gerben Groenendijk and Leendert Kok	
UR2 TUE 13:45-15:00: Network Design and Facility Location 1 Chair: Stein Wallace			
Xin Wang	A Pair-wise Heuristic Approach for Stochastic Time- dependent Service Network Design	Xin Wang, Stein W. Wallace and Teodor Crainic	
Michael Boegl	Design of a hybrid public transit system in a rural area	Michael Boegl, Karl Doerner and Andrea Kurz	

Stein W. Wallace Stochastic network design with rerouting Ruibin Bai and Stein W. Wallace

UR3 TUE 13:45-15:00: Pickup and Delivery 2 Chair: Emmanouil Zachariadis

GR4 TUE 13:45-15:00: Inventory Routing 2 Chair: Halit Uster		
Emmanouil Zachariadis	The Load-Dependent Vehicle Routing Problem and its Pick-up and Delivery Extension	Emmanouil Zachariadis, Christos Tarantilis and Chris Kiranoudis
Marjolein Veenstra	Ordering of packages in the single vehicle many-to- many pickup and delivery problem	Marjolein Veenstra
M. Grazia Speranza	The Vehicle Routing Problem with Divisible Deliveries and Pickups	Claudia Archetti, Gabor Nagy, M. Grazia Speranza and Niaz A. Wassan

Maria Elbek	Collection of Recyclable Materials with Unknown Filling Rate	Maria Elbek and Sanne Wøhlk
Martin Grunewald	An Integrated Inventory-Transportation System with Periodic Pick-Ups and Leveled Replenishment	Martin Grunewald, Thomas Volling and Thomas S. Spengler
Halit Uster	Outbound Logistics Optimization to Coordinate Aggregate-level Production-Distribution Decisions with Operational-level Vehicle Routing Decisions	Halit Uster and Gopalakrishnan Easwaran

GR7 TUE 13:45-15:00: Share/Dial-a-ride problems 1 Chair: Marco Oberscheider

Baoxiang Li	An Adaptive Meta-heuristic for the Share-a-Ride Problem	Baoxiang Li, Dmitry Krushinsky, Tom Van Woensel and Hajo A.Reijers
Rick van Urk	Optimized time differentiated parcel delivery using private and public transport	Rick van Urk, Martijn Mes and Marco Schutten
Marco Oberscheider	Analysis of different levels of service for a static multi depot dial-a-ride problem	Marco Oberscheider and Patrick Hirsch

15:30-16:20: Parallel sessions

A2 TUE 15:30-16:20: Dynamic and Stochastic Problems 4 **Chair: Barrett Thomas**

systems

Cedric Verbeeck	The orienteering problem with time-dependent stochastic travel times	Cedric Verbeeck, Pieter Vansteenwegen and El- Houssaine Aghezzaf
Barrett Thomas	Same Day Delivery for Online Purchases	Barrett Thomas, Stacy Voccia and Ann Campbell
UR1 TUE 15:30-16 Chair: An Caris	20: Benchmarks and Comparison	
Jorge E. Mendoza	VRP-REP: A vehicle routing community repository	Jorge E. Mendoza, Maxim Hoskins, Christelle Guéret, Victor Pillac and Daniele Vigo
An Caris	A methodological framework to optimize and compare VRP algorithms	Benoît Depaire and An Caris
UR2 TUE 15:30-16 Chair: Blas Pelegrin	20: Network Design and Facility Location 2	
Gianfranco Guastaroba	Kernel search for capacitated facility location problems	Gianfranco Guastaroba and M. Grazia Speranza
Blas Pelegrin	Strategy location in chain expansion under delivered pricing	Blas Pelegrin, Pascual Fernández Hernández and Maria Dolores García Pérez
UR3 TUE 15:30-16 Chair: Falk Meyer	20: Home care and technician routing 1 nolz	
Olli Bräysy	Planning Strategies for Home Care services	Olli Bräysy and Wout Dullaert
Falk Meyerholz	A computational comparison of different formulations for a rich VRP arising in homecare staff routing and scheduling	Falk Meyerholz, Stefanie Schlutter and Michael Drexl
GR4 TUE 15:30-16: Chair: Patrick Voge	20: Bike and vehicle sharing	
Stefano Novellani	An iterated greedy algorithm for the Bike-sharing Rebalancing Problem	Mauro Dell'Amico, Manuel Iori, Stefano Novellani and Thomas Stützle
Patrick Vogel	A mix-integer programming formulation and hybrid metaheuristic for tactical planning in bike sharing systems	Patrick Vogel, Bruno Neumann and Dirk Mattfeld

09:00 - 10:15: Parallel sessions

A2 WED 09:00-10:15: VeRoLog Solver Challenge 1 Chair: Martin Josef Geiger

Oliver Lum	On Solving the Swap Body Vehicle Routing Problem	Ping Chen, Xingyin Wang, Oliver Lum and Bruce Golden
Raca Todosijevic	VNS based heuristic for the Swap-Body Vehicle Routing Problem	Raca Todosijevic, Said Hanafi, Bassem Jarboui, Nenad Mladenovic and Dragan Urosevic
Martin Josef Geiger	An Iterated Variable Neighborhood Search Approach for the VeRoLog Solver Challenge 2014	Martin Josef Geiger and Sandra Huber

UR1 WED 09:00-10:15: VRP Variants 4 Chair: Joanna Bauer

Mahmood Rezaei	A branch-and-price algorithm for 2-period vehicle routing problems	Yves Crama, Mahmood Rezaei and Tom Van Woensel
Véronique François	Vehicle routing problems with multiple trips: using specific local search operators	Véronique François, Yasemin Arda, Yves Crama and Gilbert Laporte
Joanna Bauer	Adapting the Savings Heuristic to Capacitated Open Vehicle Routing	Joanna Bauer and Jens Lysgaard

UR2 WED 09:00-10:15: Routing Problems with Profits 1 Chair: Pamela Nolz

Ángel Corberán	On the Orienteering Arc Routing Problem	Claudia Archetti, Ángel Corberán, Isaac Plana, José María Sanchis and M. Grazia Speranza
Fabien Tricoire	Branch and bound for the biobjective team orienteering problem with time windows	Sophie Parragh and Fabien Tricoire
Pamela Nolz	A bi-objective orienteering problem for activity scheduling with multiple time windows and dependencies	Pamela Nolz, Ulrike Ritzinger and Fabien Tricoire

UR3 WED 09:00-10:15: Pickup and Delivery 3

Chair: Javier Faulin

Emrah Demir	An adaptive large neighborhood search algorithm for the pickup and delivery problem with fixed scheduled line services	Veaceslav Ghilas, Emrah Demir and Tom Van Woensel
Lotte Verdonck	Analysing and solving the joint route planning problem in a horizontal carrier cooperation context	Lotte Verdonck, An Caris, Benoît Depaire, Katrien Ramaekers and Gerrit K. Janssens
Javier Faulin	A Multi-Start Biased algorithm for the Vehicle Routing Problem with Backhauls	Javier Belloso, Javier Faulin and Angel Juan

GR4 WED 09:00-10:15: Maritime Inventory Routing Chair: Magnus Stålhane

Vitoria Pureza	Some contributions to mathematical modeling of ship inventory routing in the oil industry	Vitoria Pureza, Amelia Stanzani, Bruno Da Silva, Denise Yamashita and Reinaldo Morabito
Ahmad Hemmati	A General Short Sea Inventory-Routing Problem	Ahmad Hemmati, Lars Magnus Hvattum, Marielle Christiansen and Gilbert Laporte
Magnus Stålhane	Introducing Vendor Managed Inventory Service in Tramp Shipping	Magnus Stålhane, Henrik Andersson, Marielle Christiansen and Kjetil Fagerholt

GR7 WED 09:00-10:15: Share/Dial-a-ride problems 2 Chair: Michael Schilde

Sacha Varone	An insertion heuristic for a dynamic Dial-a-Ride Problem using geographical maps	Sacha Varone and Vytenis Janilionis
Yves Molenbruch	Operational Effects of Variations in Service Level Criteria for the Dial-a-Ride Problem	Yves Molenbruch, Kris Braekers and An Caris
Michael Schilde	Integrating stochastic time-dependent travel speed in solution methods for the dynamic dial-a-ride problem	Michael Schilde, Karl F. Doerner and Richard F. Hartl

10:45 - 12:00: Parallel sessions

A2 WED 10:45-12:00: VeRoLog Solver Challenge 2 Chair: Nabil Absi

Haihong Xiao	A Hybrid Heuristics for the Vehicle Routing Problem with Swap Location	Mingliang Tao, Yateng Hong, Meng Wang, Jun Li and Haihong Xiao
Rick van Urk	Heuristically Solving the Swap-Body Vehicle Routing Problem	Rick van Urk and Arturo Pérez Rivera
Nabil Absi	A relax-and-repair procedure for the Swap-Body VRP	Nabil Absi, Diego Cattaruzza, Dominique Feillet and Sylvain Housseman
UR1 WED 10:45-12:00: Vehicle Routing with Time Windows 1 Chair: Remy Spliet		
Marilène Cherkesly	A Hybrid Metaheuristic for the Pickup and Delivery Problem with Time Windows and LIFO Loading	Marilène Cherkesly, Guy Desaulniers and Gilbert Laporte
Çağrı Koç	A Hybrid Evolutionary Algorithm for Heterogeneous Fleet Vehicle Routing Problems with Time Windows	Çağrı Koç, Tolga Bektaş, Ola Jabali and Gilbert Laporte
Remy Spliet	The Discrete Driver Assignment Vehicle Routing Problem	Remy Spliet and Guy Desaulniers

UR2 WED 10:45-12:00: Routing Problems with Profits 2 Chair: Verena Schmid

Demetrio Laganà	A branch and cut algorithm for the Undirected Capacitated General Routing Problem with profits	Demetrio Laganà, Claudia Archetti, Luca Bertazzi and Francesca Vocaturo
Frédéric Semet	A unified math-heuristic framework for multi- constraint travelling salesman problems with profits	Rahma Lahyani, Mahdi Khemakhem and Frédéric Semet
Verena Schmid	Hybrid Metaheuristic for the Team Orienteering Problem with Time Windows and Service Time Dependent Profits	Verena Schmid

UR3 WED 10:45-12:00: Location Routing Chair: Henrik Andersson

Mingzhe Li	A Stochastic Location-Routing Model for Prepositioning and Distributing Emergency Supplies	Yidong Zhang, Aakil Caunhye, Mingzhe Li and Xiaofeng Nie
Yannis Marinakis	A Multi-Start Variable Neighborhood Search Algorithm with Path Relinking for the Location Routing Problem with Stochastic Demands	Yannis Marinakis and Magdalene Marinaki
Henrik Andersson	Integrated production planning and distribution in the newspaper industry	Henrik Andersson

GR4 WED 10:45-12:00: Port logistics Chair: Jorge Riera-Ledesma

Carsten Boll	New Generation Container Port	Carsten Boll
Yue Wu	Modelling logistics systems involving straddle carriers and quay cranes in container terminals	Yue Wu and Jiabin Luo
Jorge Riera-Ledesma	Scheduling of Intelligent and Autonomous Vehicles under pairing/unpairing collaboration strategy in container terminal: Exact Approaches	Shahin Gelareh Gelareh and Jorge Riera-Ledesma
GR7 WED 10:45-12:00: Electric Vehicle Routing 1 Chair: Bülent Catay		
Afroditi Anagnostopoulou	The Electric Vehicle Routing Problem with Time Windows: recent trends and insights for future research	Afroditi Anagnostopoulou, Maria Boile, Sotirios Theofanis, Eleftherios Sdoukopoulos and Dimitrios Margaritis
Christian Doppstadt	The Hybrid Electric Vehicle - Vehicle Routing Problem	Christian Doppstadt and Achim Koberstein
Bülent Çatay	An Adaptive Large Neighborhood Search Approach for Solving the Electric Vehicle Routing Problem with Time Windows	Bülent Çatay and Merve Keskin

13:45 - 14:35: Parallel sessions

A2 WED 13:45-14:35: VeRoLog Solver Challenge 3 Chair: Vladimir Deineko

Jan Christiaens	A heuristic approach to the Swap-Body Vehicle Routing Problem	Jan Christiaens, Sam Van Malderen, Túlio Toffolo, Tony Wauters
Vladimir Deineko	A framework for vehicle routing: an application for the swap-body vehicle routing problem	Vladimir Deineko, Vinh Doan, Alex Tiskin
UR1 WED 13:45-14 Chair: Duygu Tas	1:35: Vehicle Routing with Time Windows 2	
Diego Cattaruzza	An Iterated Local Search for the Multi Commodity Multi Trip Vehicle Routing Problem with Time Windows	Diego Cattaruzza, Nabil Absi, Dominique Feillet and Daniele Vigo
Duygu Tas	A Vehicle Routing Problem with Flexible Time Windows	Duygu Tas, Ola Jabali and Tom van Woensel

UR2 WED 13:45-14:35: Freight Consolidation

Chair: Marco Schutten

Leonardo Malta	Models for intermodal transportation integrating container assembling and routing	Leonardo Malta, Nicolas Jozefowiez and Frédéric Semet
Marco Schutten	Consolidation planning in transportation networks with transshipments	Wouter Van Heeswijk, Martijn Mes and Marco Schutten

UR3 WED 13:45-14:35: Home care and technician routing 2

Chair: Barrett Thomas

Sixtine Binart	A two-stage column generation based method for a field service routing problem with stochastic travel and service times	Sixtine Binart, Pierre Dejax, Michel Gendreau and Frederic Semet
Barrett Thomas	The Technician Routing Problem with Experience- based Service Times	Mike Hewitt, Barrett Thomas and Xi Chen

GR4 WED 13:45-14:35: Bike and vehicle sharing 2

Chair: Burak Boyacı

Mor Kaspi	Partial Parking Reservation Policies in One-Way Vehicle Sharing Systems	Mor Kaspi, Tal Raviv, Michal Tzur and Hila Ben-David
Burak Boyacı	Optimizing fleet relocation operations for one-way electric car-sharing systems	Burak Boyacı, Nikolas Geroliminis and Konstantinos Zografos
GR7 WED 13:45 Chair: Michael S	-14:35: Electric Vehicle Routing 2 Schneider	
Min Wen	A combined station location and vehicle recharging problem	Min Wen and Stefan Ropke

Michael Schneider Recharging Decisions in Electric Vehicle Routing Irnich

15:00 - 1600: Awards and closing session

A1: Awards

A1: Closing session Chair: Stein Wallace