Conference LOT 2014
Logistics, optimization and transportation

Detailed scientific program
Molde, September 1 – 2

Each presentation should last for maximum 20 minutes, plus maximum five minutes for discussion.

Conference session rooms in the B building:
B137 1st floor,  B360 3rd floor

B137: Opening, closing and plenary sessions. M1-A, M2-A, T1-A, T2-A, T3-A
B360: M1-B, M2-B, T1-B, T2-B, T3-B
LOT 2014 – Sessions

Registered speakers in **bold**

**Plenary 1: Monday 09:00 – 10:00, Chair: Dave Woodruff**

Stefan Voss  
Matheuristics Applications at Container Terminals

**Session M1-A: Monday 10:30 – 12:10, Chair: Geir Hasle**

Jörn Schönberger  
Supporting the fast implementation of new vehicle routing algorithm ideas by generic software classes for data management

Johan Oppen, Niels Agatz and F. Jordan Srour  
The Designated Driver Problem

Marc Sevaux, María Soto, André Rossi and Andy Reinholz  
OVRP for the transportation of handicapped people

Geir Hasle  
The Mixed Capacitated General Routing Problem

**Session M1-B: Monday 10:30 – 12:10, Chair: Michal Koháni**

Markus Brachner and Lars Magnus Hvattum  
A Collaborative Coverage and Location Problem for Offshore Search-and-Rescue Preparedness

Nils Egil Søvde  
Large scale modeling of forest resources

Joana Dias  
Dynamic Plant Location Problems under Uncertainty: how should we assess the quality of a solution?

Michal Koháni, Jaroslav Janacek and Lubos Buzna  
An Approximation Algorithm for the Facility Location Problem with Fairness Criterion

**Plenary 2: Monday 13:45 – 14:45, Chair: Svein Bråthen**

Odd I. Larsen  
Trip generation and trip chaining in the Norwegian model system for short distance travel
Session M2-A: Monday 15:15 – 16:55, Chair: Jean-Paul Watson

Jonathan Eckstein and Wang Yao

Teodor Gabriel Crainic, Luca Gobbato, Guido Perboli and Walter Rei

David Woodruff

Jean-Paul Watson, David R. Strip and David L. Woodruff

Approximate Versions of the Alternating Direction Method of Multipliers

Stochastic Capacity Planning: a multiple-recourse formulation

Progressive Hedging for Forest Harvest and Transport Planning Under Uncertainty

Deployment of Enterprise-Scale Systems Sustainability Optimization on Commodity Computing Clusters

Session M2-B: Monday 15:15 – 16:55, Chair: Stein W. Wallace

Truls Flatberg, Arnt-Gunnar Lium, Michal Kaut and Marte Fodstad

Pavel Popela and Radomil Matousek

Jan Roupec, Dusan Hrabec, Pavel Popela and Kjetil Haugen

Stein W. Wallace, Xin Wang and Teodor Gabriel Crainic

Combining cost-benefit analysis and transport optimization

Advances in Stochastic Quadratic Problem

Hybrid Algorithm for Here-and-Now Stochastic Network Design Problem with Pricing

A constructive heuristic for a stochastic service network design problem

Plenary 3 – Tuesday 09.00 – 10.00, Chair: Marielle Christiansen

Michel Gendreau

Stochastic Vehicle Routing: an Overview and some Recent Advances
Session T1-A: Tuesday 10:30 – 12:10, Chair: Trond Steihaug

Julius Rebo
Discrete process of storage with some models of incoming elements in groups

Ward Passchyn, Dirk Briskorn and Frits C.R. Spieksma
A dynamic programming approach for scheduling locks in sequence

Jesper Larsen, Richard Lusby and Troels Martin Range
Optimization of Patient Admission Scheduling

Trond Steihaug and Shahadat Hossain
When Sparsity Counts

Session T1-B: Tuesday 10:30 – 12:10, Chair: Vitaly Strusevich

Manuel Herrera, Lourdes Trujillo, Casiano Manrique and Per Agrell
Influence of ship capacity restrictions on Liner ship fleet deployments. Transshipment implications.

Christian Vad Karsten and Anant Balakrishnan
Modeling and Solving the Liner Shipping Service Selection Problem

Øyvind Halskau
Off-shore helicopter routing in a hub and spoke fashion: minimizing expected number of fatalities

Vitaly Strusevich and Hans Kellerer
Single Flight Low Risk Helicopter Transportation with Objectives Related to Total Weighted Risk

Session T2-A: Tuesday 13:45 – 15:00, Chair: Christian Prins

Jan Brinkmann, Marlin W. Ulmer and Dirk C. Mattfeld
Inventory Routing for Bike Sharing Systems

Yannis Marinakis, Magdalene Marinaki and Athanasios Migdalas
An Adaptive Particle Swarm Optimization Algorithm for the Vehicle Routing Problem with Time Windows

H. Murat Afsar and Christian Prins
A Lagrangean method for the clustered traveling salesman problem with or without cluster priorities
Session T2-B: Tuesday 13:45 – 15:00, Chair: Jaroslav Janacek

**David Bunch**

**Felix Köster, Marlin W. Ulmer and Dirk C. Mattfeld**
Influence of traffic management on urban routing

**Jaroslav Janacek and Marek Kvet**
Effective Set of Ordered Values for Fair Design of Public Service System

Session T3-A: Tuesday 15:20 – 17:00, Chair: Arild Hoff

**Sawsan Amous Kallel and Younes Boujelbene**
New variant of Heterogeneous Vehicle Routing Problem solving by clustering genetic algorithm

**Ulavzimir Rubasheuski**
Multi Stage Stochastic Programming formulation for Combined Inventory Transportation Problem

**Eugen Sopot and Irina Gribkovskaja**
Vehicle Routing Problems with Deliveries and Pickups of Multiple Commodities

**Urooj Pasha, Arild Hoff and Lars Magnus Hvattum**
The Recurring Fleet Size and Mix Vehicle Routing Problem with Stochastic Demands

Session T3-B: Tuesday 15:20 – 17:00, Chair: Lars Magnus Hvattum

**Marielle Christiansen**
Maritime Inventory Routing

**Kjetil Fagerholt, Nora Gausel, Jørgen G. Rakke and Harilaos N. Psaraftis**
Maritime Routing and Speed Optimization with Emission Control Area Regulations

**Lars Magnus Hvattum and Gregorio Tirado**
Time is of the essence in stochastic and dynamic maritime routing and scheduling problems