

# Detailed program

**Thursday 11:15-12:30**

## **TA-1: COMEX Decision Making (C.611)**

**Chair:** B. Fortz

- [Testing Rationality of Collective Household consumption](#)  
*F. Talla Nobibon, L. Chechye, Y. Crama, T. Demuyne, B. De Rock, F.C.R. Spieksma*
- [On the statistical analysis of overlapping observations in large networks](#)  
*Y. Wang, J. Ramon*
- [Dantzig-Wolfe Reformulation for the Network Pricing Problem with Connected Toll Arcs](#)  
*B. Fortz, M. Labbé, A. Violin*

## **TA-2: Production 1 (C.601)**

**Chair:** E.-H. Aghezzaf

- [Dynamic Product Portfolio Management with Life Cycle Considerations](#)  
*A.C. Zeballos, J.-S. Tancrez, R.W. Seifert*
- [Energy-Neutral Demand Response from a Large Population of batch-process loads](#)  
*A. Latiers, F. Glineur, E. De Jaeger*
- [Measuring Complexity in Mixed-Model Assembly Workstations](#)  
*L. Zeltzer, V. Limère, E.-H. Aghezzaf, H. Van Landeghem*

## **TA-3: Global Optimization (C.602)**

**Chair:** D. Claeys

- [On jet-convex functions and their tensor products](#)  
*V. Shikhman, O. Stein*
- [Hybrid approach for generating laser cutting tool patterns](#)  
*R. Dewil, P. Vansteenwegen, D. Catrysse*
- [Optimal group sizes for dynamic group screening](#)  
*D. Claeys, J. Walraevens, B. Steyaert, H. Bruneel*

## **TA-4: Transportation 1 (C.603)**

**Chair:** C. Vanovermeire

- [Intermodal network design for freight transportation in Belgium – location of rail/road and road/inland waterway terminals](#)  
*M. Mostert, S. Limbourg*
- [Using Contraction Hierarchies to Find Dissimilar Paths in Transportation Networks](#)  
*S. Demeyer, M. Houbraken, T. Walcarius, P. Audenaert, D. Colle, M. Pickavet*
- [Analysis of different cost allocation methods in a collaborative transport setting](#)  
*C. Vanovermeire, D. Vercruysse, K. Sörensen*

## Thursday 14:00-15:40

### TB-1: COMEX Health (C.611)

**Chair:** G. Vanden Berghe

- [Planning the caregivers at Landelijke Thuiszorg](#)  
*P. A. Maya, M. Castro, K. Sörensen, and P. Goos*
- [Automatic Constraint Weight Extraction for Nurse Rostering: A Case Study](#)  
*M. Mihaylov, P. Smet and G. Vanden Berghe*
- [The overlapping case in an integrated staffing and rostering formulation](#)  
*Komarudin, M.-A. Guerri, G. Vanden Berghe, T. De Feyter*
- [Hardness analysis and a new approach for the shift minimisation personnel task scheduling problem](#)  
*P. Smet, T. Wauters, G. Vanden Berghe*

### TB-2: Routing (C.601)

**Chair:** G.K. Janssens

- [Elementary shortest path problems for a multiple-trip vehicle routing problem](#)  
*Y. Arda, Y. Crama, H. Küçükaydin*
- [State of the art of vehicle routing problems with loading constraints](#)  
*H. Pollaris, K. Braekers, K. Ramaekers, G.K. Janssens, A. Caris*
- [The effect of customer characteristics on coalition gains in collaborative vehicle routing](#)  
*C. Defryn, C. Vanovermeire, K. Sörensen*
- [A time-dependent vehicle routing problem in the service area of intermodal terminals](#)  
*K. Braekers, A. Caris, G.K. Janssens*

### TB-3: Meta-Heuristics (C.602)

**Chair:** P. Vansteenwegen

- [Multi-Objective Large Neighborhood Search](#)  
*R. Hartert, P. Schaus*
- [OscAR.cblls: an open source framework for constraint-based local search](#)  
*R. De Landtsheer, C. Ponsard*
- [The Budget-Constrained Min Cost Flow Problem](#)  
*S. Coene, F.C.R. Spieksma, P. Maya, K. Sörensen, P. Goos*
- [A Memetic Algorithm for the Orienteering Problem with Intermediate Facilities](#)  
*A. Divsalar, P. Vansteenwegen, D. Catrysse*

### TB-4: Transportation 2 (C.603)

**Chair:** F.C.R. Spieksma

- [Optimisation model for empty container repositioning](#)  
*F. Salmon, S. Limbourg*

- [The Red-Blue Transportation Problem](#)  
*W. Vancroonenburg, F. Della Croce, D. Goossens, F. Spieksma*
- [The ship placement problem: Decision support through exact decomposition](#)  
*J. Verstichel, P. De Causmaecker, G. Vanden Berghe*
- [The lockmaster's problem: a computational study](#)  
*W. Passchyn, S. Coene, F.C.R. Spieksma, G. Vanden Berghe, D. Briskorn, J. L. Hurink*

## Thursday 16:10-17:25

### TC-1: COMEX Routing (C.611)

**Chair:** K. Sörensen

- [An Adaptive Large Neighborhood Search for a Vehicle Routing Problem with Multiple Trips and Driver Shifts](#)  
*Y. Arda, Y. Crama, V. François*
- [New Metaheuristics for the Risk Constraint Cash-in-Transit Vehicle Routing Problem](#)  
*L. Talarico, K. Sörensen, J. Springael*
- [Routing for couriers: a multi-objective tabu search method to rebalance a tactical route plan with microzones](#)  
*J. Janssens, J. Van Den Bergh, K. Sörensen, D. Cattrysse*

### TC-2: Sets, Relations and Rankings (C.601)

**Chair:** B. De Baets

- [A Set-Based Approach to the Decomposition of Linear Mixtures Using Quasi-Convex Programming](#)  
*J. Verwaeren, M. Rademaker, B. De Baets*
- [Dice representability of reciprocal relations](#)  
*K. De Loof, B. De Baets, H. De Meyer*
- [Using a natural monotonicity constraint as the basis of a ranking procedure](#)  
*M. Rademaker, B. De Baets*

### TC-3: Logistics (C.602)

**Chair:** S. Demeyer

- [Automatic Aircraft Cargo Load Planning with Pick-up and Deliveries](#)  
*V. Lurkin, M. Schyns*
- [A tabu-embedded simulated annealing algorithm for a selective pickup and delivery problem](#)  
*T. Maes, K. Ramaekers, G.K. Janssens, A. Caris*
- [An insertion-based heuristic for the constrained pickup and delivery problem](#)  
*M. Houbraken, T. Walcarius, S. Demeyer, P. Audenaert, D. Colle, M. Pickavet, P. Demeester*

## Friday 9:00-10:15

### FA-1: COMEX Logistics (C.611)

Chair: Y. Crama

- [The cooperative facility location problem](#)  
*L. Verdonck, A. Caris, P. Beullens, K. Ramaekers, G.K. Janssens*
- [Two- and three-dimensional strip packing: a shaking procedure](#)  
*T. Wauters, J. Verstichel, G. Vanden Berghe*
- [Multiperiod vehicle loading with stochastic release dates](#)  
*Y. Arda, Y. Crama, Th. Pironet, D. Kronus, P. Van Hentenryck*

### FA-2: Production 2 (C.602)

Chair: D. Tuytens

- [Lexicographic optimization of a bi-objective permutation flow shop with time lags](#)  
*E. Dhouib, D. Tuytens, J. Teghem, T. Loukil*
- [General lotsizing problem in a closed-loop supply chain with uncertain returns](#)  
*G. Amand, Y. Arda*
- [A branch and bound algorithm for a lexicographic optimization of a bi-objective permutation flowshop with time lags](#)  
*A. Vandaele, D. Tuytens*

### FA-3: MIP (C.603)

Chair: T. Dokka

- [The characterization of affine maximizers when there are only two alternatives: A technical note](#)  
*T. Marchant, D. Mishra*
- [Covering Linear Programs with Violations](#)  
*F. Qiu, S. Ahmed, S. S. Dey, L. A. Wolsey*
- [Approximation Algorithms for Multi-Dimensional Vector Assignment problems](#)  
*T. Dokka, Y. Crama, F.C.R. Spieksma*

## Friday 14:30-16:10

### FB-1: COMEX Automatic tuning and organization (C.611)

Chair: T. Stützle

- [From Grammars to Parameters: Automatic Design of Iterated Greedy Algorithms](#)  
*F. Mascia, M. López-Ibáñez, J. Dubois-Lacoste, T. Stützle*
- [Automatic algorithm selection for multi-mode resource-constrained project scheduling problems](#)  
*T. Messelis, P. De Causmaecker*

- [Predicting parameter configurations for tuning effective algorithms on very large instances](#)  
*F. Mascia, M. Birattari, T. Stützle*
- [An Approach to the Automatic Configuration of a Generalized Metaheuristic Structures](#)  
*M.-E. Marmion, F. Mascia, M. López-Ibáñez, T. Stützle*

## **FB-2: Disaster, Water & Biology (C.602)**

**Chair:** L. Porretta

- [SIMEDIS disaster management simulator: major road traffic accident](#)  
*C. Ullrich, F. Van Utterbeeck, E. Dhondt, M. Debacker*
- [Two-stage stochastic integer programming models for strategic disaster preparedness](#)  
*A. Döyen, N. Aras, Y. Arda*
- [Generation of synthetic water distribution networks](#)  
*A. De Corte, K. Sörensen*
- [A Class Representative Model for Pure Parsimony Haplotyping under Uncertain Data](#)  
*D. Catanzaro, M. Labbé, L. Porretta*

## **FB-3: Decision Making (C.603)**

**Chair:** D. Goossens

- [Progressive multi-objective optimization](#)  
*K. Sörensen, J. Springael*
- [Elicitation procedures for the comparison of decisional maps](#)  
*V. Brison, M. Pirlot*
- [Designing a combinatorial auction for Solids](#)  
*D. Goossens, F. Spieksma, S. Ondertal, J. Pijnacker*
- [On a queue with customer deadlines](#)  
*H. Bruneel, T. Maertens*