

## Program of the 4<sup>th</sup> International Workshop on Lot-Sizing, Brussels

Sunday 25<sup>th</sup> August 2013

<b>Time</b>		<b>Location</b>
<b>18:30-22:00</b>	Welcome drink and dinner	Fondation Universitaire

Monday 26<sup>th</sup> August 2013

<b>Time</b>		<b>Location</b>
<b>9:00-9:10</b>	Opening	
<b>9:10-10:40</b>	Models I	Fondation Universitaire
<b>10:40-11:00</b>	Coffee break	Fondation Universitaire
<b>11:00-12:30</b>	Formulations and Polyhedra I	Fondation Universitaire
<b>12:30-14:00</b>	Lunch	Fondation Universitaire
<b>14:00-15:30</b>	Models II	Fondation Universitaire
<b>15:30-16:00</b>	Coffee break	Fondation Universitaire
<b>16:00-17:30</b>	Complexity / Approximability I	Fondation Universitaire

Tuesday 27<sup>th</sup> August 2013

<b>Time</b>		<b>Location</b>
<b>9:00-10:30</b>	Stochastic Models & Risk	Fondation Universitaire
<b>10:30-11:00</b>	Coffee break	Fondation Universitaire
<b>11:00-12:00</b>	Formulations and Polyhedra I	Fondation Universitaire
<b>12:00-13:30</b>	Lunch	Fondation Universitaire
<b>13:30-15:00</b>	Complexity / Approximability II	Fondation Universitaire
<b>15:00-15:30</b>	Coffee break	Fondation Universitaire
<b>15:30-16:30</b>	Algorithms / Heuristics I	Fondation Universitaire
<b>16:30</b>	Business Meeting	Fondation Universitaire
<b>18:00</b>	Brussels Visit & Conference Dinner	Starting from F U

Wednesday 28<sup>th</sup> August 2013

<b>Time</b>		<b>Location</b>
<b>9:30-11:00</b>	Contracting & Collaboration	Fondation Universitaire
<b>11:00-11:30</b>	Coffee break	Fondation Universitaire
<b>11:30-12:30</b>	Algorithms / Heuristics II	Fondation Universitaire
<b>12:30-14:00</b>	Lunch	Fondation Universitaire
<b>14:00-15:00</b>	Models III	Fondation Universitaire
<b>15:00</b>	Farewell drink	Fondation Universitaire

## Monday

### 9:00 Welcome

### 9:10 – 10:40 Models I

Integrated supply and production planning, *Christian Aldemer & Fanny Hein*

Simultaneous lotsizing and scheduling with common setup operators and multiple production steps, *Karina Copil & Horst Tempelmeier*

Lot sizing for spare parts and refurbished cores in a remanufacturing environment  
*Nil Nurlu Deniz & Meltem Denizel*

### 11:00 – 12:30 Formulations and Polyhedra I

Valid inequalities for an inventory routing relaxation set,  
*Agostinho Agra, Mahdi Doostmohammadi & Cid Carvalho de Souza*

Multi-product valid inequalities for the DLSP with sequence-dependent changeover costs,  
*Céline Gicquel & Michel Minoux*

A bucket indexed formulation for nonpreemptive single machine scheduling problems  
*Hamish Waterer, Natashia Boland & Riley Clement*

### 14:00 – 15:30 Models II

Tactical production planning under system availability constraint  
*Martin Gehan, Nabil Absi, Bruno Castanier, Stéphane Dauzère-Pérès & David Lemoine*

Uncapacitated single-item lot sizing problem with capacity reservation contract  
*Houcem Ghribi, Ayse Akbalik, Atidel B. Hadj-Alouane & Nathalie Sauer*

A conic optimization approach for SKU rationalization  
*Tanguy Kegelart & Mathieu Van Vyve*

### 16:00 – 17:30 Complexity / Approximability I

Polynomial time algorithms for cardinality constrained robust lot sizing models  
*Dong Li & Dolores Romero Morales*

The economic lot sizing problem with by-products and inventory bounds, *Mehmet Onal*

Location on a line with demand and supply selection, *Haldun Süral & Hüseyin Güden*

## Tuesday

### 9:00 – 10:30 Stochastic models and Risk I

The stochastic lot sizing problem with controllable processing times  
*Esra Koca, Hande Yaman & M. Selim Aktürk*

Incorporating risk management on the production planning of food goods  
*Pedro Amorim, Douglas Alem & Bernardo Almada-Lobo*

First results on stochastic capacitated lot sizing in closed-loop supply chains  
*Florian Sahling, Timo Hilger & Horst Tempelmeier*

### 11:00 – 12:00 Formulations and Polyhedra II

Single-item reformulations for a Vendor Managed Inventory Routing Problem  
*Laurence A. Wolsey & Pasquale Avella*

Rolling horizon formulations for short-medium term production planning  
*Luis Guimarães, Diego Klabjan & Bernardo Almada-Lobo*

### 13:30 – 15:00 Complexity / Approximability II

A 1.58-competitive algorithm for on-line economic lot-sizing  
*Mathieu Van Vyve & Claudio Telha*

Solving a multi-level lot-sizing problem with inventory bounds  
*Wilco van den Heuvel, Hark-Chin Hwang, Stéphane Dauzère-Pérès & Albert Wagelmans*

Efficient approximation algorithms for economic lot-sizing in continuous-time  
*Claudio Telha & Mathieu Van Vyve*

### 15:30 - 16:30 Algorithms / Heuristics I

Smoothing procedures for an integrated approach for multi-level lot sizing and detailed scheduling, *Urrutia Gómez, David Edwin, Riad Aggoune & Stéphane Dauzère-Pérès*

Reoptimization capabilities of benders decomposition for production routing under demand uncertainty, *Raf Jans, Yossiri Adulyasak & Jean-François Cordeau*

### 16:30 Business Meeting

### 18:00 Brussels Visit & Conference Dinner

## Wednesday

### 9:00 – 10:30 Contracting & Collaboration I

Jumping the hurdles for collaboration: fairness in lot sizing problems with capacity pooling, *Alejandro Lamas & Philippe Chevalier*

Designing supply contracts in a two-echelon supply chain with information asymmetry  
*Zahra Mobini Dehkordi, Wilco van den Heuvel & Albert Wagelmans*

Capacity, subcontracting and lot-sizing with demand time windows, *Hark-Chin Hwang*

### 11:00 – 12:00 Algorithms / Heuristics II

Decomposition algorithm for multi-level lot sizing problem  
*Xue Lu & Zeger Degraeve*

Solving combined maintenance scheduling & lot-sizing via a fix-and-optimize heuristic  
*Fahimeh Shamsaei & Mathieu Van Vyve*

### 14:00 – 15:00 Models III

Tight scheduling constraints for the integrated lot sizing and scheduling problem  
*Socorro Rangel, Michelli Maldonado & Alistair Clark*

Simultaneous lotsizing and scheduling considering scarce resources  
*Martin Wörbelauer & Herbert Meyr*

### 15:00 Farewell Drink