

IWLS 2018 Program:

Tuesday , August 21, 2018

19:00-20:00 - Welcome Reception (Workshop)

20:00-22:00 – Dinner (served by the hotel to guests) + Drinks (Workshop)

Day 1: Wednesday, August 22, 2018

08:15-08:45 Registration

08:45-09:00 Opening & Welcome

09:00-10:30 Session - Applications (chair: Alistair Clark)

Applications of Lot-Sizing

Alistair Clark

A Case Study in the Glass Container Industry: Thermos flask production

Magna Paulina de Souza Ferreira, Flaviana Moreira de Souza Amorim,

Márcio da Silva Arantes, Claudio Fabiano Motta Toledo

A Lot Sizing Perspective for the Battery Storage Coordination in Power Distribution Systems

Caio Santos, Ellen Cavalheiro, Petra Bartmeyer, Rodrigo Lima, Christiano Lyra

10:30-11:00 Poster Introductions (chair: Maristela Santos)

11:00-11:30 Coffee Break/Poster Session

11:30-13:00 Session - Integrations (chair: Kelly Poldi)

Decomposition methods for a capacitated three-level lot sizing and transportation problem with a distribution structure

Matthieu Gruson, Jean-François Cordeau, Raf Jans

Integrated lot sizing and cutting stock problems in paper industries

Livia Maria Pierini, Kelly Cristina Poldi

Leveraging Capacity Planning with Maintenance Insights

Manuel Díaz-Madroñero, Luís Guimarães, Bernardo Almada-Lobo, Ayse Akbalik, Christophe Rapine

13:00-14:30 Lunch (served by the hotel to guests)

16:30-18:30 Happy Hour (Workshop)

19:00-20:30 Dinner (served by the hotel to guests)

Day 2 Thursday, August 23, 2018

09:00-10:30 Session – Stochastic and Robust (chair: Kerem Akartunali)

Reformulations for Robust Lot-Sizing Problem with Remanufacturing Option and Backlogging

Öykü Naz Attila, Agostinho Agra, Kerem Akartunali, Ashwin Arulselvan

Heuristics for the stochastic economic lot sizing problem with remanufacturing

Onur A. Kilic, Huseyin Tunc

Stochastic lot-sizing for remanufacturing planning with lost sales and returns

Franco Quezada, Céline Gicquel, Safia Kedad-Sidhoum

10:30-11:00 Coffee Break/Poster Session

11:00-12:30 Session - Extensions (chair: Nabil Absi)

Detailed production planning models with flexible lead time constraints

Sébastien Beraudy, Nabil Absi, Stéphane Dauzère-Pérès

A strategic production problem balancing cost and flexibility

Etienne de Saint Germain, Vincent Leclère, Frédéric Meunier

Lot-sizing models with simultaneous backlogging and lost sales

Raf Jans, Matthew Arsenault

12:30-14:00 Lunch (served by the hotel to guests)

14:00-15:30 Session – Heuristics (chair: Pedro Munari)

A column generation based heuristic for Inventory routing with practical constraints

Pedro Munari, Aldair Alvarez, Reinaldo Morabito

New progresses on a greedy construction heuristic for capacitated lot-sizing problems

Christian Almeder

A Lagrangian heuristic for the capacitated lot sizing and scheduling problem on parallel related production lines

Willy A. Oliveira, Maristela O. Santos, Kerem Akartunali

15:30-16:00 Coffee Break/Poster Session

16:00-17:30 Session – Stochastic and Integrations (chair: Raf Jans)

Stochastic Lot Sizing Problem with Joint Service Level Constraints

Narges Sereshti, Yossiri Adulyasak, Raf Jans

Multi-stage stochastic capacitated lot sizing under tight service constraints

Fabian Friese

A single-item lot-sizing problem with a by-product and inventory bounds

Elodie Suzanne, Nabil Absi, Valeria Borodin, Wilco van den Heuvel

17:30-18:00 Meeting of the EURO Working Group on Lot-Sizing

20:00-23:00 Workshop's Dinner (Beach Party)

Day 3 Friday, August 24, 2018

09:00-10:30 Session - Complexity and Algorithms (chair: Wilco van den Heuvel)

Approximation algorithms for lot-sizing problems using sandwich functions

Guillaume Goisque, Christophe Rapine, Wilco van den Heuvel, Albert P. M.

Wagelmans

Revisiting the Zero-Inventory Property in Remanufacturing

Meltem Denizel

Comparison of different cuts to interactively solve production lot-sizing and scheduling problems in cases of infeasibilities

Fernanda Alves, Maurício C. de Souza, Thiago H. Nogueira, Martín Ravetti

10:30-11:00 Coffee Break

11:00-12:30 Session - Applications and Integrations (chair: Silvio Araujo)

A supply chain tactical planning approach for optimizing the tomato processing industry

Cleber Rocco, Reinaldo Morabito, Luís Guimarães, Bernardo Almada-Lobo

Integrated Lot Sizing, Scheduling and Cutting Stock Problem

Gislaine Mara Melega, Silvio Alexandre de Araujo, Reinaldo Morabito

Integrated lot sizing and blending problems

Diego Jacinto Fiorotto, Raf Jans, Silvio Alexandre de Araujo

12:30-14:00 Lunch (served by the hotel to guests)

Poster Session:

Integrated Lot Sizing and Cutting Stock Problem Applied to a Spring Industry

Pedro Rochavetz de Lara Andrade, Silvio Alexandre de Araujo, Adriana Cristina Cherri Nicola

Heuristics for the lot sizing and scheduling problem of production with demand order management

Rudivan Barbosa, Willy Oliveira, Maristela Oliveira Santos

Machine Flexibility in Lot Sizing Problems: Construction of Heuristics

Melka Catelan, Silvio Araujo, Diego Fiorotto

The Integrated Lot-Sizing and Cutting Stock Problem Applied to a Mattress Industry

Maurício Móz Christofolletti, Silvio Alexandre de Araujo, Adriana Cristina Cherri, Raf Jans

An optimization model for the general lot sizing and scheduling problem in beverage production

Deisemara Ferreira, Victor Mario Noble Ramos

A fix-and-optimize with objective function exchange applied to the production planning in pulp and paper industry.

Marcos Mansano Furlan, Maristela Oliveira Santos, Reinaldo Morabito

Reformulations for the Lot Sizing Problem: an initial study

Maurício Rocha Gonçalves, Silvio Alexandre de Araujo

Capacitated lot sizing and replanning problem for machining industry

Matheus Artioli Leandrin, Adriana Cristina Cherri, Luiz Henrique Cherri

Production planning considering cutting and scheduling aspects

Felipe Kesrouani Lemos, Silvio Alexandre de Araujo, Adriana Cristina Cherri, Horácio Hideki Yanasse

A new model integrated in the planning and programming of furniture production

Guilherme de Oliveira Macedo, Carla Tavianne Lucke da Silva Ghidini

Integrated Lot Sizing and Cutting Stock Problem with Usable Leftovers

Douglas Nogueira do Nascimento, Silvio Alexandre de Araujo, Adriana Cristina Cherri

A lot sizing and cutting stock problem in a trusses slabs industry

Sônia Cristina Poltroniere, Ângelo Henrique Dinhane Vassoler, Silvio Alexandre de Araujo

Production planning integrated to the optimization problem of the use of molds

Caroline Signorini, Silvio Araujo, Gislaine Melega

The integrated lot sizing and transportation problem

Samanta Teixeira, Silvio Araujo, Diego Fiorotto