



Séminaire étudiant conjoint / Joint Students Seminar
CIRRELT*/GERAD/MORSC

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A COMPARISON OF FORMULATIONS FOR AN INTEGRATED THREE-LEVEL LOT SIZING AND TRANSPORTATION PROBLEM WITH A DISTRIBUTION STRUCTURE

ABSTRACT: Over the last decades, lot sizing problems have drawn the attention of many researchers, mainly because of their numerous applications in production, distribution and inventory management problems. In this talk, we address a three-level lot sizing and transportation problem with a distribution structure (3LSPD). We consider one production plant that produces one type of item over a discrete and finite planning horizon. The objective of the problem is to determine the optimal timing and flows of goods between the different facilities while minimizing the operational and transportation costs in the whole network. We propose 16 different MIP formulations to solve the problem and based on numerical experiments, we analyze the strengths of each formulation. These conclusions are compared and contrasted to theoretical results we could prove on the LP relaxation of each formulation.

Note: Matthieu Gruson is a PhD candidate at the Department of Logistics and Operations Management at HEC Montreal. His area of research is on mathematical sciences - Applied Mathematics. His research proposal is mainly focused on modelling and solving three-level lot sizing and transportation problems with a distribution structure.

VENDREDI / FRIDAY
20 octobre 2017, 12h
October 10th, 2017, 12:00

Salle / Room 5441
Pavillon André-Aisenstadt
Université de Montréal

Pizza et boissons gazeuses fournies
Pizza and soft drinks offered

Réservé aux étudiants
For students only

Maximum : 25 participants

Inscription obligatoire au plus tard le 19 octobre / Registration required no later than October 19th

<https://symposia.cirrelt.ca/Seminaire-etudiant-conjoint/register>

* Étudiants du CIRRELT intéressés à présenter / CIRRELT students interested in presenting : Mehdi.Mahnam@cirrelt.ca



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