



Séminaire des étudiants du CIRRELT Students Seminar*

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STOCHASTIC CLOSED-LOOP SUPPLY CHAIN NETWORK DESIGN

ABSTRACT: In this talk we present a stochastic optimization approach for designing a closed-loop supply chain network in the context of modular structured products. It accounts for uncertainty in the quality status of the return stream, modeled as binary scenarios for each component in the reverse bill of material. To deal with the intractable number of scenarios in the proposed model, a scenario reduction scheme is adapted to the problem of interest to preserve the most pertinent scenarios based on a distance measure. The reduced stochastic problem is then solved via L-shaped algorithm enhanced with surrogate constraints and Pareto-optimal cuts. Numerical results indicate that the scenario reduction scheme provides good quality solutions to the true stochastic problem through applying the accelerated L-shaped method.

Mohammad Jeihoonian is currently a PhD student at the department of Mechanical and Industrial Engineering of Concordia University.

VENDREDI / FRIDAY

13 mai 2016, à 12h
May 13th, 2016, at 12:00

Salle / Room 5441
Pavillon André-Aisenstadt
Université de Montréal

Pizza et boisson gazeuse fournies
Pizza and soft drink offered

Réservé aux membres du CIRRELT
FOR CIRRELT MEMBERS ONLY

Inscription obligatoire au plus tard le 12 mai / Registration required no later than May 12th
<https://symposia.cirrelt.ca/SeminaireEtudiant/fr/register>

*** Étudiants de 2^e et 3^e cycle intéressés à présenter / Graduate students interested in presenting : Mehdi.Mahnam@cirrelt.ca**

