



Séminaire des étudiants du CIRRELT Students Seminar*

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sous la direction du professeur Teodor Gabriel Crainic
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A THREE-PHASE MATHEURISTIC FOR CAPACITATED MULTI-COMMODITY FIXED-COST NETWORK DESIGN WITH DESIGN-BALANCE CONSTRAINTS

ABSTRACT: This paper proposes a three-phase matheuristic solution strategy for the capacitated multi-commodity fixed-cost network design problem with design-balance constraints. The proposed matheuristic combines exact and neighbourhood-based methods. Tabu search and restricted path relinking meta-heuristics cooperate to generate as many feasible solutions as possible. The two meta-heuristics incorporate new neighbourhoods, and computationally efficient exploration procedures. The feasible solutions generated by the two procedures are then used to identify an appropriate part of the solution space where an exact solver intensifies the search. Computational experiments on benchmark instances show that the proposed algorithm finds good solutions to large-scale problems in a reasonable amount of time.

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VENDREDI / FRIDAY

25 avril 2014, à 12h

April 25th, 2014, at 12:00

Salle / Room 5441

Pavillon André-Aisenstadt

Université de Montréal

Pizza et boisson gazeuse fournies

Pizza and soft drink offered

Inscription obligatoire avant le 24 avril / Registration required before April 24th

<https://symposia.cirrelt.ca/SeminairesEtudiants/fr/register>

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

