



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

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Ph.D., Polytechnique Montréal, avec/with  
Martin Trépanier / André Langevin

## SOLVING WINTER MAINTENANCE ROUTING PROBLEMS

**ABSTRACT:** In this talk, I'm going to introduce some operational problems encountered in the field of winter maintenance. I will go into more details about the snowplow routing problems. The objectives and the constraints will be presented in details along with a case study. Then, I will describe the Adaptive Large Neighborhood Search (ALNS) that we have used to solve the problem. I will go into more details about some improvements that we have done over the algorithm to better handle the problem. Finally, since this work is more oriented toward real case studies and data, I will describe how we get the data using a GIS and the preparation required for the algorithm. I will also briefly present how we can present the results to the users.

**VENDREDI / FRIDAY**

**31 mars 2017, 12h  
March 31st, 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 30 mars / Registration required no later than March 30<sup>th</sup>**

**Inscription sur le site du CIRRELT / Registration available on the CIRRELT Website**

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

