



**SÉMINAIRE CONJOINT
AVEC LA CHAIRE DE RECHERCHE DU CANADA EN
DISTRIBUTIQUE ET LA CHAIRE DE RECHERCHE DU
CANADA EN LOGISTIQUE ET EN TRANSPORT**

Le mercredi 24 septembre, à 10h00

Salle 5441, Pavillon André-Aisenstadt
Campus de l'Université de Montréal
2920, Chemin de la Tour

CONFÉRENCIÈRE

Amy Cohn
University of Michigan

TITRE

Test-and-Prune: A New Algorithm for Combinatorial Optimization Problems

RÉSUMÉ

In this talk I will present a new algorithm, which we call *Test-and-Prune*, for solving a variety of combinatorial optimization problems. This research was originally motivated by a bi-level optimization problem in manufacturing, and has since been enhanced to also address combinatorial optimization problems with multiple objective criteria and network design problems with probabilistic chance constraints. In addition to presenting the algorithm, I will briefly discuss applications from automotive stamping, healthcare scheduling, and wind farm design.

Bio: Dr. Cohn is an Assistant Professor of Industrial and Operations Engineering at the University of Michigan. She earned the A.B. in Applied Mathematics from Harvard University and the PhD in Operations Research from the Massachusetts Institute of Technology. Her primary research focus is on applied combinatorial optimization problems in transportation and logistics. She focuses largely on passenger airline applications and is a recent Fellow of the Alfred P. Sloan Foundation Industry Studies Program, of which she is an Affiliate. She is also an Affiliate of the MIT Global Airline Industry Program. Other collaborations include Ford Motor Company, the Boston University School of Medicine, and the University of Michigan schools of Business, Natural Resources and Energy, and Medicine.

RESPONSABLE

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