



Séminaire-Webinaire conjoint avec / Joint Seminar-Webinar with
Chaire en Planification des systèmes intelligents de logistique et de transport /
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UQÀM

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A BI-LEVEL APPROACH FOR LAST-MILE DELIVERY

Zoom: <https://uqam.zoom.us/j/88045981061/> Meeting ID: 880 4598 1061

Abstract: Last-mile delivery is regarded as an essential, yet challenging problem in city logistics. One of the most common initiatives, implemented to streamline and support last-mile activities, are satellite depots. These intermediate logistics facilities are used by companies in urban areas to decouple last-mile activities from the rest of the distribution chain. Establishing a business model that considers different stakeholders' interests and balances the economic and operational dimensions, is still a challenge. In this seminar, we will introduce a novel problem that broadly covers such setting, where the delivery to customers is managed through satellite depots and the interplay and the hierarchical relation between the problem agents are modeled in a bi-level framework. Two mathematical models and an exact solution approach, properly customized for our problem, will be presented, and extensive computational experiments on benchmark instances and a real case study discussed. Finally, we will shed light on future research directions on how the proposed approach can be extended for other relevant problem classes.

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Bio: Maria Elena Bruni is Associate Professor in Operations Research at the University of Calabria since 2006. She received a Ph.D in Operations Research at the University of Calabria and a M.S. in Public Economy from the University of Sapienza (Rome). Her research activity focuses on designing solution methods for combinatorial problems under uncertainty and risk, with applications mainly in scheduling, routing and healthcare. She is co-author of more than 60 papers accepted in refereed journals and author of two book chapters. She received the best paper prize of the IMA Journal of Management mathematics journal in 2016.

MARDI / TUESDAY

24 janvier 2023, 10h30
January 24th, 2023, 10:30

Pavillon André-Aisenstadt
Room 5441

[Zoom](#)

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Responsable / Organizer
Teodor Gabriel Crainic