Workshop: **Mathematical Models of Optimization for Transportation Planning**

supported by the project **MTM2015-67706-P**

March 3, 2017
Instituto de Matemáticas de la Universidad de Sevilla (**IMUS**).
Edificio Celestino Mutis

Invited Speaker: Gilbert Laporte
Canada Research Chair in Distribution Management HEC Montréal

Logistics Service Network Design for Humanitarian Response in East Africa

The United Nations Humanitarian Response Depot (UNHRD) is an important humanitarian logistics service provider that manages a network of depots. This research project aims to analyze the potential benefits of adding a regional distribution center in Kampala, Uganda, to its existing network. To this end, we used fieldwork, simulation, optimization and statistical analyses to assess the costs of prepositioning relief items in Kampala and to propose a robust stocking solution. The UNHRD has already started to implement the solution proposed in this study, which should result in a mean cost reduction of around 21%.
This is joint work with Émilie Dufour, Julie Paquette and Marie-Ève Rancourt.

PROGRAM

9:30-10:00	Presentation
10:00-11:00	**Analysis of the Energy-efficient design of Railway Rapid Transit Timetables** David Canca Ortiz **Current and past research projects on vehicle routing problem** Alfredo García Hernández-Díaz
11:00-11:30	Pause
11.30-12:30	**Invited Speaker:** Gilbert Laporte **Logistics Service Network Design for Humanitarian Response in East Africa**
12:30-13:30	**Modelling the navigation to nearest park-and-ride facility** Ramón Piedra de la Cuadra, Juan A. Mesa, Francisco A. Ortega, Miguel A. Pozo **Locating rapid transit lines in sprawl cities by using an entropic analysis** Francisco A. Ortega, Ramón Piedra de la Cuadra, Soly Ventura

Organizing Committee
Eva Barrena
Alicia De Los Santos
Juan Antonio Mesa