## DIPARTIMENTO DI SCIENZE STATISTICHE



## **AVVISO DI SEMINARIO**

Il giorno **14 Aprile 2016** il prof. **Teodor Gabriel Crainic,** Ph.D., FRSC Professor of Operations Research, Logistics and Transportation, CIRRELT and School of Management, Université du Québec à Montréal, Canada terrà un Seminario dal titolo:

## "New Developments in Service Network Design" Aula 34 ore 15,30

## **Abstract**

The presentation focuses on the Scheduled Service Network Design (SSND) problem for consolidation-based freight carriers, e.g., railroads, less-than-truckload motor carriers, intermodal transportation by land and sea, postal services, City Logistics systems, etc., which support a large part of local, national and international trade. SSND formulations are the methodology of choice to build the tactical, medium-term operations plan for consolidation-based carriers. Traditionally, SSND models aim to select simultaneously the services and schedule to operate, the terminal workloads, and the routing of freight, in order to satisfy the demand in the most economic and resource-efficient way. A major research and development trend is to enlarge the scope of SSND problems to encompass not only most major tactical planning-level decisions, but also a number of operational issues related, e.g., to the management of resources and revenues. These are difficult combinatorial problems, yielding mixed-integer multicommodity formulations with fixed costs and capacities defined over time-space network representations., for which advanced matheuristics are generally proposed.

We will recall briefly the main concepts and issues in consolidation-based freight transporation and the basic SSND models. We will then examine a number of advanced SSND problems and formulations, and discuss algorithmic avenues and new research challenges.

Tutti gli interessati sono invitati a partecipare.

Prof. Nicoletta Ricciardi