

**Department of Architecture and Civil Engineering  
City University of Hong Kong**

jointly with

**Institute of Transport Studies, The University of Hong Kong**

and

**Hong Kong Society for Transportation Studies**

**Seminar**

**Date: 16 September 2019 (Monday)**  
**Time: 5:00 pm to 6:00 pm**  
**Venue: LT-14 Yeung Kin Man Acad Bldg, City University of Hong Kong**

**DISRUPTION MANAGEMENT IN RAILWAY NETWORKS**

by

**Prof. Francesco Corman**

Institute of Transport Planning and Systems, ETH Zurich, Switzerland

**ABSTRACT**

A major problem of public transport, and railways in particular, is to improve quality of operations by updating an offline timetable to the ever changing delays situation, in order to improve performance of the transport system. In railway systems, this relates to reduce train delays by reordering retiming or rerouting trains, and/or change connection plans and route advised to passengers, to improve their travel time. Key point of research is the interaction between the problem (of the infrastructure manager) to reschedule trains, and the problem (of the travellers) to find the optimal route in the network. In fact, changing passenger flows, respectively delaying trains and/or dropping passenger connections, varies the setting under which the two decision makers respectively interact. The interaction of the two decisions makers is mediated by the information one decision maker has about the other, and the service which is offered/used. We report different methods to address this dilemma, by agent-based models, or living labs.

**ABOUT THE SPEAKER**

Francesco Corman holds the chair of Transport Systems at the Institute of Transport Planning and Systems, Swiss Federal Institute of Technology, ETH Zurich, Switzerland. He has a PhD in Transport Sciences from TU Delft, the Netherlands, on operations research techniques for real-time railway traffic control. He has academic experience at KU Leuven, Belgium and TU Delft as research associate in transportation and logistics. Main research interests are in the field of railway traffic control and management to reduce delays for the system and its users. This is achieved based on quantitative methods and operations research to transport sciences, especially on the operational perspective, public transport, railways and logistics.

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**\*\*\*\*\* ALL ARE WELCOME \*\*\*\*\***