

# “Recent advances in Traffic Flow”

by Prof. Jorge Laval

Friday, July 1<sup>st</sup>, 2016, 11:00-12:00 hr  
HIL F36.1; ETH Hönggerberg, Zürich

**Abstract:**

During the last few years important breakthroughs have taken place towards better understanding the causes and effects of congestion in urban areas, from capturing realistic stop-and-go waves in car-following models, to estimation methods of the Macroscopic Fundamental Diagram of urban networks. This talk will also address the implications of a parameter-free representation of traffic flow in the simulation and control related to system-wide ramp metering, variable speed limit and congestion pricing.

**Presenter’s bio:**



Jorge Laval is an Associate Professor at the School of Civil and Environmental Engineering, which he joined in 2006. After obtaining his B.S. in Civil and Industrial Engineering from Universidad Catolica de Chile in 1995, Dr. Laval worked as a transportation engineer for 5 years at the Chilean Ministry of Public Works in Santiago, Chile. He received his Ph.D. in Civil Engineering from the University of California, Berkeley in 2004. Prior to joining Georgia Tech, Dr. Laval held two consecutive one-year postdoctoral positions at the Institute of Transportation Studies at UC Berkeley, and at the French National Institute for Safety and Transportation Research (INRETS). Professor Laval's main research thrust is in the area of traffic flow theory, modeling and simulation, focusing in understanding congestion in urban networks and how to manage it. He has made important contributions towards understanding the capacity of freeways, the connection between driver behavior and stop-and-go waves, freeway ramp-metering strategies, dynamic traffic assignment and congestion pricing.

Organizer: Dr. Monica Menendez ([monica.menendez@ivt.baug.ethz.ch](mailto:monica.menendez@ivt.baug.ethz.ch))  
No reservation is required.