

**SEMINAR**

Co-Sponsored by  
Pacific Southwest Region University Transportation Center

**Tuesday, November 21, 2017**

**11:00 – 12:00 pm**

*ITS Seminar Room, 4080 AIR Building*

**INFORMATION COLLECTION BEHAVIOUR AND STABILITY OF DAY-  
TO-DAY DYNAMICS IN A TRANSPORT SYSTEM**

By

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**Abstract**

A concept of equilibrium has been widely used to describe a congested transport system. For an equilibrium solution to be realized in the real world, it must be a stable solution, i.e. it must be robust against small noises onto the system. Recent studies have mentioned that a solution may not be stable in models including delays at a bottleneck. If there is no stable equilibrium solution in the system, we need to analyze a day-to-day dynamics to assess how the status of the system is changing over days. This talk introduces theoretical and numerical analyses of the day-to-day dynamics in a transport system to assess whether it is stable or not and how it is affected by adjustment process of travelers' behavior, especially information collection behavior.

*Takamasa Iryo is a professor of Kobe University, Japan. He received Dr. Eng. (civil engineering) from the University of Tokyo in 2002. After working as a post-doc fellow, he moved to Kobe University as a research associate in 2003. He was then promoted to an associate professor in 2010 and a full professor in 2013. He is an ISAC member of the international symposium on dynamic traffic assignment since 2010 and an associate editor of Transportmetrica B since 2013. His research topics include dynamic traffic assignment, big-data analysis for transport systems, and implementation of a traffic simulator for a large-scale network in a high-performance computer.*