



## Institute colloquium

# Dynamic graph algorithms: What they are and why they are needed?

**Monika Henzinger (University of Vienna)**

Graphs are used in many application domains to model entities and their relationships, such as social networks, the world-wide web, road maps, and communication networks. In a social network, for example, the entities are the users and their relationships are induced by their friendships in the social network. As a recent study showed, graphs modeling over a billion pairwise relationships are ubiquitous. Additionally, many such graphs are not static, but are subject to a variety of changes. This leads to question how quickly information about a graph, for example which entities form clusters, can be updated when a change occurs. We will survey the state-of-the art of this research area on dynamic graph algorithms.

**Monday, November 12, 2018 04:00pm - 05:00pm**

IST Austria Campus Raiffeisen Lecture Hall



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: [http://ist.ac.at/fileadmin/user\\_upload/pdfs/IST\\_shuttle\\_bus.pdf](http://ist.ac.at/fileadmin/user_upload/pdfs/IST_shuttle_bus.pdf) The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.