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Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Chair of Systems Design

Public Lecture

Harnessing network science to reveal our digital footprints

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Network science is an interdisciplinary endeavor, with methods and applications drawn from across the natural, social, and information sciences. In addition to theoretical developments, electronic databases currently provide detailed records of human communication and interaction patterns, offering novel avenues to map and explore the structure of social networks. I will talk about the structure of a social network based on the cell phone communication patterns of millions of individuals, and what implications it has for diffusion processes on social networks. I will also talk about social influence processes by analyzing the collective behavior induced by 100 million "app" installations on a popular social networking website. Finally, I will discuss the algorithmic detection of tightly connected groups of nodes in networks, a prominent problem in network science known as community detection.

www.sg.ethz.ch

When? Tuesday, 7 June 2011, 16.00-17.00

Where? ETH Zurich, Rämistrasse 101, HG D 7.1