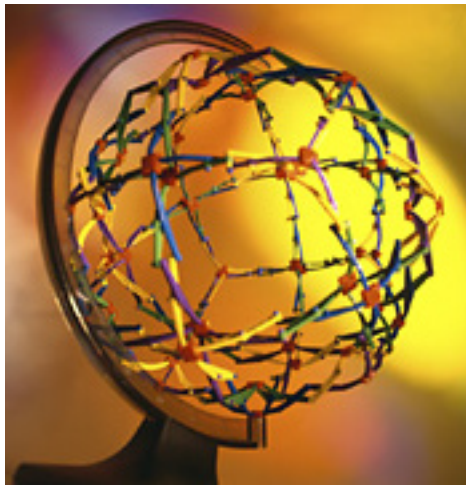


NORTHWESTERN INSTITUTE ON COMPLEX SYSTEMS PRESENTS

# Wednesdays

# @NICO



## *Measuring and Modelling Social Networks and Social Influence*

Jukka-Pekka Onnela, Fulbright Scholar  
John F. Kennedy School of Government  
Harvard University

Wednesday, March 11th, 2009

12:00 - 1:00 PM

(Refreshments served at 11:45 AM)

Chambers Hall, 600 Foster Street, Lower Level

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We have studied a society-wide network derived from the cell phone calls of millions of users. I will highlight some of our key empirical findings and will then present a model of social networks motivated by the empirical study. By starting from a set of microscopic rules governing the formation of ties at the level of individuals, the model is able to produce macroscopic social structures that are compatible with real world social networks. I then turn to social influence in a setting that allows us to connect individual and collective behavior in a self-contained system by tracking the popularity of applications installed by users of the social networking site Facebook. We observe two qualitatively different regimes of behavior, where the cross-over point corresponds to a tipping-point in popularity.

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**NICO Coffee Hour will follow for questions, networking, and collaboration.**

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