

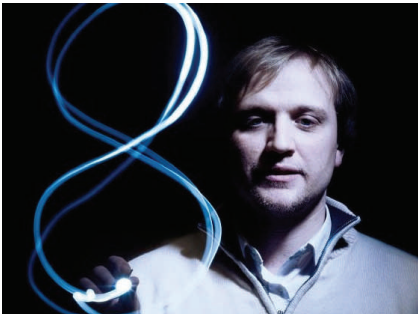


## SONIC Speaker Series



Monday, May 10, 2010  
10:00-11:00 a.m.

Room 1-483  
Frances Searle Building  
Northwestern University  
Evanston Campus



## Exploring Social Networks as an Infrastructure for Transportation Networks

We propose an exchange platform where people lend each other objects of small value, such as star-shaped screwdrivers, which are transported by the owners or by carriers (friends or acquaintances of the owner in the social network). By running simulations on mobile call detail records, which include location information, from a large metropolitan area, we evaluate the performance of several transportation strategies. Results show that completely unoptimized routing heuristics could deliver an average of 3,908 objects, over 10,000 injected objects, with an average delivery time of 0.59 days.

These preliminary results suggest that, under considerably general assumptions, social networks may indeed be an effective and inexpensive infrastructure for transportation networks. These initial results have important implications for sustainability.

**Bio:** Mauro Cherubini obtained a degree in Psychology and Education in 2001. He then worked at Media Lab Europe, in Ireland, with several study visits at MIT in Boston. In 2004, Mauro earned a Master of Arts by Research at Dublin City University. In 2008, he was conferred a PhD in Computer Science by the Swiss Federal Institute of Technology, where he conducted research on Human-Computer Interaction. In 2008, Mauro joined Telefonica Research, in Barcelona.

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