



UNIVERSITÉ
LAVAL

Faculté des sciences sociales
Faculté des sciences de l'administration



Centre de recherche sur les risques
les enjeux économiques et
les politiques publiques
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Conférence sur les interactions sociales

Salle 2415, Pavillon Laurentienne, Université Laval
Vendredi le 6 avril 2018

08h30-09h00 – Accueil (café, jus)

9h00-10h00 - **Tyler H. McCormick** - University of Washington

Using Aggregated Relational Data to feasibly identify network structure without network data (avec Emily Breza, Arun G. Chandrasekhar et Mengjie Pan)

10h00-10h30 - Pause café (café, jus, viennoiseries)

10h30-11h30 - **Eirini Tatsi** - Stockholm University (SOFI)

Peer Effects, Free-Riding and Team Diversity (avec Danny Steinbach)

11h30-13h30 – Lunch (salle à manger du pavillon La Laurentienne)

13h30-14h30 - **Chih-Sheng Hsieh**, Chinese University of Hong Kong

Superstar Economists: Coauthorship networks and research output (avec Michael König, Xiaodong Liu et Christian Zimmermann)

14h30-15h00 - Pause café (café, jus)

15h00-16h00 - **Eleonora Patacchini**, Cornell University

Treatment Effects with Heterogeneous Externalities (avec T. Arduini et E. Rainone)

16h00-16h30 - Mot de la fin

Tyler H. McCormick – University of Washington
(avec Emily Breza, Arun G. Chandrasekhar et Mengjie Pan)

Using Aggregated Relational Data to feasibly identify network structure without network data

Social network data is often prohibitively expensive to collect, limiting empirical network research. Typical economic network mapping requires (1) enumerating a census, (2) eliciting the names of all network links for each individual, (3) matching the list of social connections to the census, and (4) repeating (1)-(3) across many networks. In settings requiring field surveys, steps (2)-(3) can be very expensive. In other network populations such as financial intermediaries or high-risk groups, proprietary data and privacy concerns may render (2)-(3) impossible. Both restrict the accessibility of high-quality networks research to investigators with considerable resources.

We propose an inexpensive and feasible strategy for network elicitation using Aggregated Relational Data (ARD) -- responses to questions of the form "How many of your social connections have trait k?" Our method uses ARD to recover the parameters of a general network formation model, which in turn, permits the estimation of any arbitrary node- or graph-level statistic. The method works well in simulations and in matching a range of network characteristics in real-world graphs from 75 Indian villages. Moreover, we replicate the results of two field experiments that involved collecting network data. We show that the researchers would have drawn similar conclusions using ARD alone. Finally, using calculations from J-PAL fieldwork, we show that in rural India, for example, ARD surveys are 80% cheaper than full network surveys.

Eirini Tatsi – Stockholm University
(avec Danny Steinbach)

Peer Effects, Free-Riding and Team

We estimate the effects of peer contemporary and peer permanent productivity to understand if behavior at the workplace is affected by point-in-time performance or a high/low productivity signal. We exploit unique field panel data on cargo warehouse agents consolidating freight onto pallets with the help of a forklift. Shift composition is haphazard and team size of up to 20 agents depends on export demand. We find evidence for both types of peer effects only in teams with more than 9 agents: agents free-ride when working with high permanent-productivity peers whereas they increase performance when working with high current-productivity agents. By estimating heterogeneous effects we find that free-riding is highest when all peers belong to the nationality that comprises the majority and has on average the highest permanent productivity. Moreover, agents consider peers' point-in-time performance to be more important than peers' permanent productivity. In order to exploit efficiently the benefits of peer contemporary effects, production should take place only in large enough teams with sufficient diversity in nationality backgrounds.

Chih-Sheng Hsieh – Chinese University of Hong Kong
(avec Michael Konig, Xiaodong Liu et Christian Zimmermann)

Superstar Economists: Coauthorship networks and research output

We study the impact of research collaborations in coauthorship networks on total research output. Through the links in the collaboration network researchers create spillovers not only to their direct coauthors but also to researchers indirectly linked to them. We characterize the equilibrium when agents collaborate in multiple and possibly overlapping projects. We bring our model to the data by analyzing the scientific coauthorship network of economists registered in the RePEc author service. We rank the authors and their departments according to their contribution to aggregate research output, and thus provide a novel ranking measure that explicitly takes into account the spillover effect generated in the coauthorship network. Moreover, we analyze various funding instruments for individual researchers as well as their departments, and compare them to the economics funding program by the National Science Foundation. Our results indicate that, because current funding schemes do not take into account the availability of coauthorship network data, they are ill-designed to take advantage of the spillover effects generated in scientific knowledge production networks.

Eleonora Patacchini – Cornell University
(avec T. Arduini et E. Rainone)

Treatment Effects with Heterogeneous Externalities

This paper proposes a new method for estimating heterogeneous externalities in policy analysis when social interactions take the linear-in-means form. We establish that the parameters of interest can be identified using specific functions of the share of the eligible population. We also show that the parameters can be consistently estimated, and we study the finite sample performance of the proposed estimators using Monte Carlo simulations. The method is illustrated using data on the PROGRESA program. We find that more than 50% of the effects of the program on schooling attendance are due to externalities, which are heterogeneous within and between poor and nonpoor households.