# Centre international de criminologie comparée

#### WORKSHOP

# ADVANCED SOCIAL

## NETWORK ANALYSIS

18 AVRIL 2013

9H-15H30

Salle C-2059
Carrefour des Sciences

Pavillon Lionel-Groulx 3150, rue Jean-Brillant Montréal (Québec) H3T

RÉSERVATION AVANT LE 11 AVRIL 2013

Tél.: 514-343-7065 gwladys.benito@umontreal.ca

- > 9.00-10.30: Session 1 (visualizations, intro R, basics)
- > 10.30-11.00: Coffee break
- > 11.00-12.30: Session 2 (modeling, qap, ergm)
- > 12.30-14.00: Lunch
- > 14.00-15.30: Session 3 (network dynamics)

### **Thomas Grund**

Thomas Grund is currently a post-doctoral researcher at CICC and works on issues around social networks, social dynamics and analytical sociology. Thomas studied computer science and sociology at University of Trier (Diplom), University of Cambridge (MPhil) and University of Oxford (DPhil). Before coming to Quebec, he held positions at ETH Zurich and Nuffield College in Oxford.

The empirical study of network dynamics and emergence of social structures is currently receiving considerable attention in sociology and criminology. For example, novel actor-oriented modeling strategies, which can be used to study how network structures evolve, dramatically change the way scholars assess the social world. Networks are regarded as fluid substrate on which social dynamics unfold.

This informal workshop gives an overview on more recent techniques of Advanced Social Network Analysis. An overview on some (or all) of the topics below will be given:

- Short introduction to R
- Induced centralities
- Network visualization
- Modeling networks, p1, p2
- Quadratic assignment procedure (QAP)
- Dyad-level analysis
- Exponential random graph models (ERGM)
- Multilevel discrete time event history analysis
- Stochastic actor-oriented network models (SIENA)

#### **Prerequisites:**

- Please bring a computer that has R running with a working internet connection
- Some basic knowledge of social network analysis
- If you have your own dataset that you want to work with during the workshop, please contact me in advance: <a href="mailto:thomas.u.grund@gmail.com">thomas.u.grund@gmail.com</a>