## Multiplex Networks 2014: Towards the understanding of a complex world

ECCS'14 Satellite Workshop. Lucca, September 24th

9:30 Welcome, Presentation

## **MODELS & APPLICATIONS**

9:40 Marc Barthelemy

10:10 Adrian Carro, Raúl Torral and Maxi San Miguel

## Coupled dynamics of link and node states: A model for language competition

10:30 Nikos E Kouvaris, Shigefumi Hata and Albert Díaz-Guilera

Turing patterns in multiplex networks

10:50 Soumajit Pramanik and Bivas Mitra

Influence of interactions on the evolution of scientific citations and collaborations: a multiplex approach

11:10 Coffee break

11:30 Peter Klimek

12:00 Tiago Simas, Mario Chávez, Pablo Rodríguez-Rodríguez and Albert Díaz-Guilera Multiplex fMRI and DTI networks: A topological comparison

12:20 Sebastian Poledna and Stefan Thurner

Multiplex structure of systemic risk in financial networks

12:40 Issam Falih, Manel Hmimida and Rushed Kanawati

Community detection in multiplex networks: a comparative study

13:00: Lunch

## THEORY

14:30 Yamir Moreno

15:00 Federico Battistton, Vincenzo Nicosia and Vito Latora

Biased random walks on multiplex networks

15:20 Marina Diakonova, José J. Ramasco and Víctor M. Eguíluz

Role of heterogenity in structural properties of the mulitplex

15:40 Toni Vallès-Català, Francesco A Masucci, Roger Guimerà and Marta Sales Pardo

Grouping nodes with the same pattern of connection in two independent stochastic block models

16:00 Coffee Break

16:20 Vincenzo Nicosia

16:50 Adam Hackett, S. Melnik, D. Cellai and J. P. Gleeson

Bond percolation on multiplex networks

17:10 Rui-Qi Li, Ming Tang, Hui Pak-Ming and Zeng-Ru Di

Epidemic spreading on multi-relational networks

17:30 Emanuele Cozzo and Yamir Moreno

Measuring the complexity of a multiplex network

17:50 Maximilan Sadilek and Stefan Thurner

Physiologically motivated multiplex Kuramoto model describes phase diagram of cortical activity

18:10 **GOOD BYE**