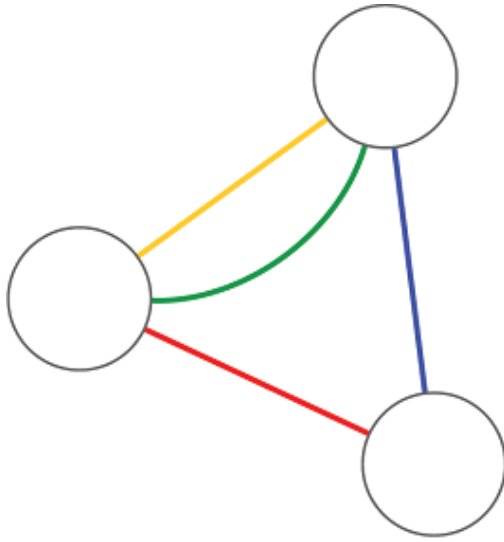


Multiple Network Modeling, Analysis and Mining

Satellite Symposium at NetSci2014 - Clark Kerr Campus - University of California

<http://multiplenetworks.netsci2014.net/>

Monday, June 2nd, 2014



Sponsor:



Description

Complex networks are used to represent complex interacting events, but many real-world phenomena may require very rich representations. For example, the entities under study may relate to each other for different reasons. In this case, network scholars developed Multiple Network models, in which nodes may be connected through different relations.

Multiple Networks require a novel network analysis toolbox. In [1] authors proved that the cascade failures in multiple networks obey to dynamics that are very different from the ones discovered for general complex networks. In [2], for their community discovery, authors needed to extend the popular concept of modularity to Multiple Networks. Finally, [3] provided some insights about the interdependence of links in Multiple Networks, paving the way to the development of a Multiple Network link prediction. These examples prove that, if reality is multifaceted, then also network analysis should be multifaceted.

[1] S. V. Buldyrev, R. Parshani, G. Paul, H. E. Stanley, and S. Havlin. Catastrophic cascade of failures in interdependent networks. *Nature*, 2010.

[2] P.J. Mucha, T. Richardson, K. Macon, M. A. Porter, and J.-P. Onnela. Community Structure in Time-Dependent, Multiscale, and Multiplex Networks. *Science*, 2010.

[3] M. Szell, R. Lambiotte, and S. Thurner. Multirelational organization of large-scale social networks in an online world. *PNAS*, 2010.

Confirmed Keynote

Renaud Lambiotte, University of Namur

Contributions

We invite you to submit a 300 word abstract including one descriptive figure by April 14, 2014 using our EasyChair submission link:

<https://www.easychair.org/conferences/?conf=mnam2014>

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Attendance

Attendance to our symposium is free of charge. However, you must register to NetSci to attend, at least for NetSci's satellites. For the NetSci2014 registration fee and deadline please see:

<http://netsci2014.net/index.php/registration>.

Contact us at mnam@isti.cnr.it.

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