

**Call for Abstracts for the organized session**  
**Statistical modeling of multimodal networks**  
**at the conference**  
**Networks in the Global World 2016**  
**Multiple Structures and Dynamics:**  
**Applications of Network Analysis to European Societies and Beyond**

**July 1-3, St. Petersburg, Russia**

[www.ngw.spbu.ru](http://www.ngw.spbu.ru)

**Deadline: March 1st 2016**

*Chair: Peng Wang, Swinburne University of Technology in Melbourne*

Traditional network metrics describe the parameters of observed networks. Meanwhile, understanding of the processes that influenced the formation of an observed network structure requires statistical models that represent distributions of networks with similar structural features to those found in the observed network, hence inferring local network processes based on estimated parameter values. By considering the interdependent nature of network links and the properties of the involved nodes, current statistical modeling techniques allow to account for different network configurations, as well as for nodal and dyadic level attributes, in order to determine the sets of factors that have a strong influence on the formation of an observed network. There are extensions for longitudinal data, revealing how the interplay of those factors unfolds in time. Moreover, the recent model developments for multi-partite networks comprised of links between ontologically different nodes, multiple networks consisting of multiple types of links among the same set of nodes, as well as multilevel networks combining multi-partite and unipartite networks, allows inferences on how these networks affect one another by simultaneously accounting for relations within and between networks of different kinds – inter-personal networks, semantic networks, organizational networks, material objects networks, networks of spaces, etc. For example, one can model how the usage of concepts connected in a semantic network is related to the existence of inter-personal ties. The models can also be compared to find differences and similarities in formation of networks in different cultures, societies, states, economies, organizations, cities, etc.

This session invites papers discussing methodological issues in multi-partite, multilevel and multiple statistical network models as well as papers testing hypotheses driven by developments in multimode network theory and applications along with the existing hypotheses tested on new data.

Particularly welcome are papers dealing with the possibilities of longitudinal multi-partite, multilevel and multiple network models.

Presentations of developments in relevant software would also be appreciated.

Please submit your abstract (not exceeding 200 words) [here](#) before **March 1st 2016**.

When submitting, don't forget to select the session title "**Statistical modeling of multimodal networks**" from the list.

The conference [website](#) provides additional information.

We are looking forward to your contributions.

Email any questions to [netglow@spbu.ru](mailto:netglow@spbu.ru).