	6th International Conference on Computational Aspects of Social Networks (CASoN) Porto, Portugal, 30th July to 1st August, 2014 http://www.mirlabs.org/cason14
Title of Session	**Multiplex network mining**
Objectives and scope	Complex networks used to model interactions in real-world phenomena are often heterogeneous network with different types of nodes and edges. Focusing on a single type of nodes, a complex network would be better described by a multiplex: a set of nodes related to each other with different types of relations. This representation is much richer than simple complex networks often used to model complex interaction systems. However, this poses the challenge to provide adequate answers to all basic network analysis tasks that have been studied and provided in the recent few years for the case of homogeneous networks. This include for instance: the problem of node ranking (computing nodes centralities), community detection, link prediction, information diffusion models and network visualization. Almost all work in the field of multiplex network analysis are based on transforming the problem, in a way or another to the classical case of homogeneous network analysis. Existing approaches include: layer aggregation based approaches or applying ensemble methods on results obtained on each layer aside. Little work has focused on analysing all layers at once. The goal of this session is make the point on new approaches for multiplex network mining.
Topics of Interest	A list of non-exhaustive relevant topics include: - Models and measures for multiplex networks. - Co-evolution of layers in multiplex networks. - Layer aggregation approaches. - Vertex similarity in multiplex network - Community detection in multiplex network - Link prediction in multiplex network - Multiplex network evolution models - Multiplex network and dynamic network mining - Ensemble learning for multiplex network mining - Applications of multiplex network mining and modeling.
Session Chair / Co-chair	Rushed Kanawati, University Paris Sorbonne Cité, LIPN CNRS UMR 7030.
Scientific Committee	The following people will be contacted to form the program community if the session proposal is accepted: **Alex Arenas** Universidad Rovira i Virgili, Spain **Michele Berlingerio**, IBM, Dublin

	Bettina Brenedt, UCL, Louvain, Belgium **Michele Coscia**, Harvard University **Jean-Loup Guillaume**, UPMC, LIP6, France. **Renaud Lambiotte**, University of Namur, Belgium **Maria Malek**, LARIS EISTI, France **Matteo Magnani**, Uppsala University, Sweeden **Ruggero Pensa**, University of Turin, Italy **Céline Rouveirol**, UPSC, LIPN, France **Eiko Yonki**, Cambridge, UK.
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Brief Biography of the session Organizers	Rushed KANAWATI is associate professor in computer science at university Paris 13 since 2000. His research interests are in the field on social network analysis, machine learning, web usage mining and recommender systems. He has chaired in last recent years a number of international and national conferences in the field of complex network mining including: the DYNAK workshop in conjunction with ECML (Edition 2010, 2014), the French conference on complex network analysis (MARAMI'13), and several national workshops. He is also co-editor of **three** special issues on the topic of community detection (International journal on web communities, Inder-science, 2012) and Dynamic network mining (Intelligent data Analysis journal, IOS press, 2011) and Social network mining (Inder-science, 2014).