

DYNAMICS ON AND OF COMPLEX NETWORKS IV

A Satellite Workshop of European Conference on Complex Systems, 2010

September 16, 2010, Lisbon University Institute, Lisbon, Portugal

Aims

The primary aim of the series of workshops "Dynamics on and of Complex Networks" has been to explore the statistical dynamics *on* and *of* complex networks.

Dynamics on networks refers to the different types of so called processes (e.g. proliferation, diffusion etc.) that take place on networks.

Dynamics of networks mainly refers to various phenomena (for instance self-organization) that go on in order to bring about certain changes in the topology of the network.

It has become clear from the past series of "Dynamics on and of Complex Networks" workshops that modeling social and information dynamics through networks has gained enormous importance. Consequently, this year the workshop will focus on the particular theme "modeling social and information dynamics through methods of complex networks".

Workshop 2010

Theme:

[Modeling social and information dynamics through methods of complex networks](#)

Those interested in delivering a talk may mail a 2-page abstract to: animesh.mukherjee@isi.it

Website for workshop:

<http://users.isi.it/~doocn/>

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Topics

Social Dynamics

- Identification of online social communities and their evolution with time
- Temporal analysis of social networks
- Social media analysis: blogs and friendship networks
- Privacy in online social networks
- Trust system over online social networks
- Search strategies in online social networks
- Epidemic propagation in online social networks
- Mobile social networks

Information Dynamics

- Peer-to-peer networks: stability, search, trust, security and deployment
- Traffic modeling in information and transportation networks
- Network analysis in information retrieval
- Network analysis of mobile phone data
- Network science for design and development of wireless/sensor networks
- Dynamical properties of ad-hoc networks of mobile agents

Past Workshops

- DOOCN I with ECCS 2007, Dresden, Germany, Oct. 2007
Extended versions of accepted papers appeared as a book volume published by Birkhauser, Boston:
[Dynamics On and Of Complex Networks: Applications to Biology, Computer Science, and the Social Sciences](#)
DOI: 10.1007/978-0-8176-4751-3
<http://www.springerlink.com/content/j91410/?p=e468272857194751a144028a58448324&pi=0>
- DOOCN II with ECCS 2008, Jerusalem, Israel, Sept. 2008
- DOOCN III with ECCS 2009, Warwick, UK, Sept. 2009

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