ESF RESEARCH CONFERENCES

Rapporteur Report

Partnership:	ESF-COST
Conference Title:	Future Internet and Society: A Complex Systems Perspective
Dates:	2-7 October 2010
Chair:	Romualdo Pastor-Satorras
Rapporteur:	Slavko Splichal

General Comments

The conference brought together an array of participants from public, private, business and university sectors in Western Europe and the USA. It provided evidence of the benefits and progress in as well as the challenges facing both future of the internet and its research in the future. The participants were unanimous in expressing the belief that the Internet is becoming absolutely fundamental, as the communications basis for business, creativity, leisure & entertainment, social networking, knowledge gathering and information transfer, for the growth of the global economy and for everyday life.

Quality of Scientific Programme, Presentations and Discussion

The conference provided an interesting overview (not representative, though) of research activities and discussions on the future of the internet, emphasizing the importance of a multidisciplinary approach. The papers have demonstrated that much of the Internet's potential and its uses have not been anticipated. It could be expected that the emergence of unthought-of entities, services and communication scenarios will also take place in the future. As a social scientist, I can hardly estimate the scientific quality of the presentations discussing the technical part of the internet; to me, they were certainly revealing. On the other hand, the conference missed the opportunity to establish a more productive dialogue with social scientists. This is not to say that the "society perspective" was completely missing but it was certainly 'undernourished'.

Informal Networking and Exchange; Atmosphere

In terms of atmosphere and informal networking, the conference organizers deserve high praise. Although the timetable was tight, the atmosphere they have created during the conference was relaxed, and vibrant discussions took place all day around from breakfast till late evening.

Balance of Participants

The conference achieved an appropriate balance between young and senior participants. This is less true of national groups (researchers from the eastern part of Europe were almost completely absent). I also believe that the conference would benefit from a stronger participation of social scientists. That would probably stimulate the discussion of security aspects, privacy issues, guaranteeing freedom of expression and opinion on the internet, the empowerment of community/society, e-citizenship and other social/societal topics, which were not discussed in the conference.

Outlook and Future Developments

In a number of private conversations I found out that a strong interest existed in collaborative approaches that would bridge the gap between social and natural sciences. With the chair Prof. Pastor-Satorras and co-chair Prof. Castellano I discussed the idea of editing a special issue of the journal of which I am the editor, containing contributions from physicists working on the application of statistical physics to social sciences related problems in the field of internet research, that would be commented by social scientists and then commented back again by the authors. They both found this a timely and good idea that would provide a chance to make the work of physicists known to social scientists (and vice versa), and thus contribute to better understanding and collaboration between the two communities.

Follow-up

I believe that a follow-up conference of the same format but with more balanced participation of social scientists would help to promote the idea that "The complexity of the current Internet structure and its future developments cannot be understood without taking a full multi-disciplinary approach. Such an approach must necessarily be based on the science of complex systems, and in particular complex network theory. It must also depend on social sciences and humanities to elucidate the underpinnings of the Internet at a societal and economic level." This was an incontestable argument for the conference, but it is also an argument for pursuing that goal in the future.

Organisation and Infrastructure

The venue in Aquafredda di Maratea is not only gorgeous but also very stimulating because it keeps participants together during the entire conference. The number of participants enabled intense conversations during the conference. I did not here one single complaint but a lot of praise of all organizational aspects of the conference.

Summary & Overall Assessment

Despite some critical issues mentioned above I found the conference very productive. I believe ESF should continue to put all efforts into providing opportunities for inter- and transdiciplinary collaboration. The internet is not only one possible area of collaboration, it is **the** most appropriate area because it is becoming the dominant research topic in a variety of traditionally mutually exclusive disciplines.