

Call for Papers

PHYSCOMNET 2009

**The Second Workshop on
Physics – Inspired Paradigms in Wireless Communications and Networks
June 27th, 2009, Seoul, Korea
<http://www.physcomnet.org>**

**in conjunction with the 7th Intl. Symposium on Modeling and Optimization in
Mobile, Ad Hoc, and Wireless Networks (WiOpt'09)
June 23-27, 2009, Seoul, Korea
<http://www.wiopt.org>**

The growing complexity of current and future wireless networks has created the need for more creative methods to analyze, model and understand them. This will hopefully lead to new ideas to describe the emergent behavior arising in large-scale, massively-distributed and highly-interacting networks of heterogeneous wireless devices. Recently, there have been several fruitful insights and approaches inspired from the realm of the physical and mathematical sciences, including statistical mechanics, electrostatics, game theory and biology, in which intuition and analogies to paradigms from other fields have been exploited. This workshop aims to bring together active researchers with different backgrounds interested in understanding and modeling the basic features of large-scale networks and wireless systems.

Topics of Interest:

The workshop welcomes submissions on all aspects of the themes, which include (but are not limited to) the following topics:

- Applications of Statistical Mechanics to Wireless and other Networks
- Applications of Random Matrix Theory in Communications Systems
- Social Aspects to Game Theory Applied to Networks
- Biologically and Sociologically Inspired Approaches to Model Networks
- Applications of Electrostatics, Optics and Magnetostatics in Optimization of Information Flow in Networks
- Entropy methods

Important Dates :

Paper submission deadline: March 1, 2009

Notification of acceptance: April 1, 2009

Camera-ready papers due: May 1, 2009

Authors are invited to submit titles and extended abstracts. Submitted manuscripts should not exceed 5 pages in length, including figures, appendix and bibliography. Abstracts should be formatted in two columns with a point size greater or equal to 10pt. Submissions will be done electronically in Adobe PDF format, through **EasyChair** (<http://www.easychair.org/>). If there are any problems with submission, please contact the workshop chairs. Accepted abstracts will be published in (post)-workshop materials, with the copyright left to the authors. Authors will be offered the possibility to have their 5-page abstracts listed in the IEEEExplore as well as in the IEEE digital library, with IEEE publication status.

Workshop Chairs:

Mérouane Debbah (*Supélec, France*)

Alexandre Poutrière (*Microsoft*)

Technical Program Committee:

Giuseppa Alfano (*Supélec, France*)

Eitan Altman (*INRIA, Sophia-Antipolis, France*)

John Baras (*ECE Dept., University of Maryland, USA*)

Laura Cottatellucci (*Eurecom, France*)

Maxime Guillaud (*ftw., Austria*)

Dongning Guo (*Northwestern University, USA*)

Jean-Marc Kelif (*Orange, France*)

Marc Mézard (*CNRS, France*)

David Saad (*Neural Computing Research Group, Aston University, UK*)

Iraj Saniee (*Bell Labs, Alcatel - Lucent, USA*)

Steven H. Simon (*Bell Labs, Lucent-Alcatel, USA*)

Aris Moustakas (*Physics Dept, Univ. of Athens, Greece*)

Ralf Müller (*Norwegian Univ. of Science & Technology*)

Antonia Tulino (*Dept. of EE & Telecoms., Napoli Univ. Federico II, Italy*)