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Workshop on interdisciplinary systems approach in performance evaluation and design of computer & communication systems

CREATE-NET



Inter-Perf

www.inter-perf.org

October 14, 2006, Pisa, Italy



Co-located with ValueTools, www.valuetools.org (First International Conference on Performance Evaluation Methodologies and Tools, October 11-13, 2006, Pisa, Italy)

Technical Program

09:15 - 09:30 **Welcome and introduction**

Invited talks session

Session chair: Sean Collins (University of Bristol, UK)

09:30 - 10:30 **Stability of decentralized control mechanisms: from congestion control to peer-to-peer broadcasting**

** Keynote talk **

Laurent Massoulié (Thomson Research, Paris)

10:30 - 11:00 **Coffee break**

11:00 - 12:00 **Reputation in self-organized communication systems and beyond**

** Invited talk **

Jochen Mundinger (EPFL)

Regular papers session

Session chair: Ayalvadi Ganesh (Microsoft Research, UK)

12:00 - 12:20 **Flash crowd in a file sharing system based on random encounters**

Ilkka Norros (VTT), Balakrishna Prabhu (VTT), Hannu Reittu (VTT)

12:20 - 12:40 **Peer to peer networks for defense against Internet worms**

Srinivas Shakkottai (UIUC), R. Srikant (UIUC)

12:40 - 13:00 **Dynamic storage load balancing with analogy to thermal diffusion for P2P file sharing**

Masato Uchida (Kyushu Institute of Technology), Kei Ohnishi (Kyushu Institute of Technology), Kento Ichikawa (Kyushu Institute of Technology), Masato Tsuru (Kyushu Institute of Technology), Yuji Oie (Kyushu Institute of Technology)

13:00 - 14:00 **Lunch**

Invited talks session

Session chair: Milan Vojnović (Microsoft Research, UK)

14:00 - 15:00 **Optimal design and operation of massively dense wireless networks (or How to solve 21st century problems using 19th century mathematics)**

** Keynote talk **

Stavros Toumpis (University of Cyprus)

15:00 - 15:45 **A Packing approach to compare slotted and non-slotted medium access control**

** Invited talk **

Mathilde Durvy (EPFL)

15:45 - 16:20 **Coffee break**

Regular papers session

Session chair: Peter Marbach (University of Toronto, Canada)

16:20 - 16:40 **Optimal networks, congestion and Braess' paradox**

Raul J. Mondragon C. (Queen Mary, University of London)

16:40 - 17:00 **Qualitative dynamical analysis of queuing networks with inhibition**

Vincent Guffens (Imperial College, London), G. Bastin (Universite de Louvain, Belgium)

17:00 - 17:20 **TCP symbiosis: congestion control mechanisms of TCP based on Lotka-Volterra competition model**

Go Hasegawa (Osaka University), Masayuki Murata (Osaka University)

17:20 - 17:30 **Closing remarks**