

SCOPE:

With diversification of wireless access technologies and their application fields, the role of wireless access is no longer the last hop terminal access, but also for repeating functionality such as mesh/multi-hop/ad-hoc/sensor networking. Thereby more complicated wireless network management, especially radio resource management is required to organize the networks well as a whole. As the optimal wireless resource management based on a centralized control policy becomes difficult to implement in practice, distributed and/or cooperative control techniques should be introduced in necessary parts in any layer, such as distributed antenna, cognitive radio, distributed MAC, and dynamic heterogeneous networking. Even in a cellular system, the design of distributed control strategies becomes a key issue for realizing cooperative/coordinated MIMO and multi-hop cellular networks.

TOPIC AREAS:

The main purpose of this workshop is to systematize the academic basis over the various topics in wireless distributed networks as listed below, and to discuss the adaptability of these new technologies to enhance the performance of wireless distributed networks.

Application

Ad-hoc network, Multi-hop network, Mesh network, Sensor network, Self-organized network, Advanced cellular network, Heterogeneous network, and Cooperative transmission system, Smart utility network, Wireless grid

Technology

BS/AP cooperation, Cooperative sensing, Cooperative relay, Cross layer optimization, Distributed MAC, Distributed MIMO, Distributed RRM/Scheduling, Interference alignment, Network coding, Spatial spectrum sharing, Super position coding, Virtual antenna array

Theory

Array signal processing, Bayesian network, Convex optimization, Decomposition methods, Game theory, Graph theory, Multi-dimensional Information theory

SUBMISSION GUIDELINES:

Papers should be in English, not exceeding 5 double-column (overlength pages will be charged for). and should follow IEEE paper templates. Papers need to be uploaded to the **EDAS** (http://edas.info//N10647). Accepted papers will be published in the IEEE Xplore and orally presented at the workshop. For more information about paper submission please visit conference web site.

IMPORTANT DATES:

- Full Paper Submission: 28 April 2011
- Acceptance Notification: 3 June 2011
- Final Camera Ready Copy: 30 June 2011
- Workshop: September 2011

Please see http://www.icwdn.org/ for more information about WDN 2011.

ORGANIZING COMMITTEE:

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