4th International Conference on Cognitive Radio Oriented Wireless Networks and Communications

22nd-24th June 2009 in Hannover, Germany

The owned spectrum allocation model in use today is believed to be obsolete. Firstly due to its intrinsic principle of fixed resource allocation that leads to a supposed spectrum scarcity, later revealed to be a question of non-efficient utilization. Secondly comes into play the need of introducing new wireless applications and services, which have experienced a huge growth in the last couple of decades, and are now supposed to cope with a multitude of already deployed standards. Both scenarios motivate the use of dynamic spectrum access in order to turn primary licensed networks into dynamic spectrum access networks (DSANs). This lends itself to cognitive radio, an enabling technology that will benefit several types of players and help to implement a more efficient approach regarding spectrum requirements in the future.

The aim of this conference is to bring together the state of the art research contributions that address the various aspects of cognitive wireless systems and technologies, including a broad range of communications, networking and implementation issues. We seek original and unpublished work not currently under review by any other journal, magazine or conference.

Topics include, but are not limited to, the following:

Track 1 – New Trends

- Regulations, standardization and implementation for Cognitive Radio
- Dynamic spectrum access networks (DSANs):
  - Secondary markets
  - Business models
  - Industrial role
- Trust and security mechanisms

Track 2 – Interference and Coexistence Analysis

- Interference metric modeling
- Beamforming, MIMO and anti-jamming channel coding as interference avoidance strategies
- Radio resource management and dynamic spectrum sharing
- Spectrum sensing mechanisms and protocol support
- Wireless network co-existence
- Ultra-Wideband cognitive radio systems

Track 3 – Networks

- Game theory applied to mobile ad hoc networks (MANETs)
- Self-organizing mesh networks and autonomic communications
- Applications of cognitive networks (e.g. emergent and public safety networks)
- Bio and AI-inspired algorithms
- New architectures and platforms for cognitive radio & software defined radio
- Radio access protocols and algorithms for the PHY, MAC, and Network layers
- Cross-layer cognitive algorithms
- Quality-of-service provisioning

Track 4 – Research Projects

Cognitive Radio & Networks related projects are invited to present their work at CrownCom2009.

In association with

EUWB, Sendora, PHYDYAS, ARAGORN

Important Dates

Paper Submission Due:	23rd February 2009
Tutorial Proposals Due:	23rd February 2009
Special Session Proposals Due:	3rd November 2008
Acceptance Notification:	20th April 2009
Camera-Ready Papers Due:	4th May 2009

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Call for Papers

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