



# CROWNCOM

## General Chairs

Thomas Kaiser,  
Leibniz Univ. Hannover(LUH), Germany  
Markus Fidler,  
TU Darmstadt, Germany

## General Vice-Chair

Andreas Wilzeck, LUH, Germany

## Program Chair

Maria D. Pérez-Guirao, LUH, Germany

## TPC Chairs

Carlos Cordeiro, Intel Corp., USA  
Luiz A. DaSilva, Virginia Tech, USA  
Aarne Mämmelä, VTT, Finland  
Lars Berlemann, Dt. Telekom AG, Germany

## Panel Chairs

Petri Mahonen, RWTH Aachen, Germany  
Christophe Le Martret, THALES L & JS, France

## Special Session Chair

Sven Zeisberg, HTW Dresden, Germany

## Tutorial Chairs

Klaus Moessner, Univ. Surrey, UK  
Maurice Bellanger, CNAM, France

## Sponsorship Chair

Feng Zheng, LUH, Germany

## Web & Publication Chairs

Souhir Daoud, LUH, Germany  
João Paulo Miranda, LUH, Germany

## Local Arrangement Chairs

Kim Bartke, LUH, Germany  
Henrik Schumacher, LUH, Germany  
Eva-Maria Schröder, LUH, Germany

## Financial Chair

Barbara Adler, LUH, Germany

## Conference Consultant

Maria Morozova, ICST, Belgium

## Publicity Chairs

*Europe*  
Maria-Gabriella Di Benedetto,  
Univ. of Rome La Sapienza, Italy  
*USA*  
Ozgur Oyman, Intel Corp., USA  
*Asia*  
Cheng-Xiang Wang, Heriot-Watt Univ., UK  
*Australia*  
Sam Reisenfeld, Univ. Tech. Sydney, Australia

## Steering Committee

*Chair*  
Imrich Chlamtac, Create-Net, Italy  
*Members*  
Honggang Zhang, Zhejiang Univ., China  
Rajarathnam Chandramouli,  
Stevens Institute of Technology, USA  
Thomas Hou, Virginia Tech, USA  
Francois Chin, I2R, Singapore

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

22<sup>nd</sup>-24<sup>th</sup> 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.

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

- Novel adaptation and optimization algorithms suitable for Cognitive Radios and Cognitive Radio Networks
- Analysis of performance and performance enhancement methods of CRs, including methods for network management and QoS-provisioning.
- Self-organizing mesh networks and autonomic communications
- Applications of cognitive networks (e.g. emergent and public safety networks)
- 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

### Track 4 – Research Projects

Large on-going Cognitive Radio & Networks related research projects in Europe, USA and Asia will show their latest results at CrownCom 2009.

In association with



Call for Participation

info@crowcom2009.org

www.crowcom2009.org

