Important deadlines:
- Submission (full paper)  November 30, 2010
- Notification  January 10, 2011
- Registration  January 25, 2011
- Camera ready  January 31, 2010

Tracks:

**Fundamentals**
Cognitive radio and network architectures; Collaborative radio networks; Information theory and performance limits of dynamic spectrum access; Agile spectrum and dynamic spectrum sharing techniques; Cognitive spectrum sharing, coexistence, and interoperability; Cross-layer algorithms based on spectrum sensing techniques; Cognitive radio sensing in the large and feature detection; Collaboration optimization and refinement; Collaborative spectrum sensing schemes with weighted user contributions; Connectivity, capacity, and scalability of heterogeneous systems via cognitive networking; Auction and pricing models for dynamic spectrum sharing

**Mechanisms and protocols**
Interoperability, interference and co-existence of dissimilar wireless networks; Distributed algorithms for spectrum detection and cooperative spectrum sensing; Models and fundamental limits of cognitive networking; Transient behavior and stability analysis in cognitive networking; Cognitive MAC, multicast, and routing protocols for heterogeneous networks with highly dynamic topology; Software radio and radio resource allocation; Spectrum policy reform issues and standardization

**Processing and devices**
Propagation channel modeling and utilization; Cognitive and collaborative radio architecture for equipments; Transceivers and front-end technologies, SOC and SIP; MIMO, advanced signal processing, and smart antennas; Primary transmitter shadowing and fading; High-speed and broadband wireless technologies; Software defined radios and cognitive radios; Hardware reconfigurability; Smart antennas; Passive antennas

**Measurement and management**
Software radio and cognitive radio management; Interference measurements and metrics; Spectrum and performance management in cognitive radio networks; Security and robustness issues in cognitive networking; Cooperative resource management and optimization; QoS provisioning in adaptive, spectrum agile, and cognitive networks; Context management, sensing, reasoning and context acquisition; Traffic patterns, topology, mobility, and interference tolerance in cognitive networking; Statistical inference and cognition with from measurements that are inaccurate, incomplete, inconsistent, and delayed measurements; Sensing and feedback mechanism in cognitive networking and the associated cost; Cognitive radio with reinforcement learning

**Applications**
Cognitive radio applications; Wideband sensing and multiband agile wireless networks; Future Internet with cognitive technologies; Flexible and opportunistic wireless access; Multimedia communications through cognitive networks; Simulation of cognitive wireless networks; Cognitive radio test-beds and hardware prototypes