



PHYDYAS Workshop detailed program

The advent of cognitive radio systems : impact of the physical layer

10h00 Opening of the workshop Maurice Bellanger (CNAM)

Morning (10h05 - 12h45) : Cognitive radio physical layer Chairman: Markku Renfors (TUT)

- 10h05 *Invited speaker:* Multicarrier techniques for cognitive radio, *Behrouz Farhang-Boroujeny* (Univ.Utah)
- 10h45 Filter bank design for multicarrier transmission and spectrum sensing, *Markku Renfors* (TUT)
- 11h05 Data aided and blind synchronization, *Mario Tanda* (UNINA)
- 11h25 Coffee break
- 11h45 Equalization and optimization in FBMC, *Jérôme Louveaux* (UCL)
- 12h05 MMSE equalization of FBMC systems with forward error correction, *L.Baltar, D.Waldhauser, J.A.Nossek* (TUM)
- 12h25 Channel estimation and tracking for MIMO – FBMC systems, *L.Kofidis* (RA-CTI)
- 12h45 End of morning session

Afternoon (14h15 - 17h45) : Cognitive radio scenarios Chairman: Josef Nossek (TUM)

- 14h15 *Invited Speaker:* Overview of Cognitive Radio, *P. Mähönen and M. Petrova* (RWTH-Aachen)
- 14h55 FBMC and Cognitive Radio, *D. Le Ruyet, D.Roviras* (CNAM)
- 15h15 *Invited Speaker:* Cognitive Radio in TV bands - 802.22, *Monisha Ghosh* (Philips-USA)
- 15h55 Coffee break
- 16h15 Dynamic spectrum allocation in uncoordinated cognitive radio networks based on adaptive antenna array interference mitigation diversity, *A.Kuzminskyi* (ALUK)
- 16h35 Cognitive radio scenario with cooperation between nodes, *C.Bader*, (CTTC)
- 16h55 *Invited Speaker:* Cognitive Radio Standardization objectives in FP7, *R.Biswas and W.Koenig*, EU/RAS-SEG
- 17h35 Open questions and discussion

17h45 Conclusion of the workshop, Maurice Bellanger (CNAM)