Wireless digital communications
can benefit from the cooperative coding and signal processing.
TSCC2013 is organized as a set of tutorials
aimed for advanced MSc and PhD students.

Tools for cooperative communications

20-22 May 2013, CTU in Prague, FEE, Czech Republic

COST-IC1004/FP7-DIWINE Training School

Tools for cooperative communications

Cooperative communications, as well as being a major theme of COST IC1004, is increasingly the focus of much research in wireless communications, since wireless networks increasingly involve interactions between larger and larger numbers of nodes, which must cooperate to enable efficient communication. In conjuction with the FP7 DIWINE project, COST IC1004 is organising a Training School on 'Tools for Cooperative Communications', which will consider a whole range of techniques for designing and optimising cooperative wireless networks, including Wireless Network Coding, distributed signal processing and interference management, and will be introduced by Frank Fitzek who will discuss how cooperation and wireless network coding can also increase energy efficiency.

Location & Time

- Monday-Wednesday 20-22 May 2013
- rooms 209 and/or 434
- see http://radio.feld.cvut.cz/conf/TSCC2013/ for details

Přednášky jsou pro studenty FEL zdarma (bez nároku na občerstvení a obědy). Registrace emailem Jan.Sykora@fel.cvut.cz provedená nejpozději 15.5.2013 je nutná vzhledem k plánování místností.

Program

Monday 9:00-12:40 Frank Fitzek: Green Mobile Clouds: Network Coding and User Cooperation for Improved Energy Efficiency

Monday 13:30-17:00 Umberto Spagnolini: Distributed signal processing and synchronization

Tuesday 9:00-12:30 Eduard Jorswieck: Distributed Interference Processing in Single- and Multi-hop Interference Channels

Tuesday 13:30-17:00 Jan Sykora and Alister Burr: Advances in Wireless Network Coding

Wednesday 9:00-10:30 Daniel Calabuig: The limits of cooperation. The Gaussian broadcast channel and Gaussian multiple access channel

Wednesday 11:00-12:30 Michal Wodczak: Autonomic management of cooperative networking

Wednesday 13:30-14:30 Russell Haines: Cooperative Communications in Standards and Industry

COST IC1004 project — Cooperative Radio Communications for Green Smart Environments

- More information about IC1004 is available at http://www.ic1004.org/

DIWINE FP7 project — Dense Cooperative Wireless Cloud Network

- More information about DIWINE is available at www.diwine-project.eu

About DiRaC (Digital Radio Communications) group

DiRaC group is the research group at the department of Radio Engineering K13137 at FEE/CTU. The group is headed by prof. Jan Sykora. General areas of activity are: Digital communication theory - modulation, coding, physical layer signal processing algorithms, Information theory, Parameter estimation and detection theory, Stochastic signal processing.
In our current effort, we concentrate on: Wireless Network Coding, Network coded modulation in Multi-node and Multi-source systems, Mobile radio communication systems with distributed, cooperative and MIMO coding and processing, Nonlinear Space-time modulation and coding, Iterative Factor Graph based technique in detection, channel state estimation and equalization, Adaptive modulation under specific constraints.

More information at...

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- http://radio.feld.cvut.cz/dirac/

Digital Radio Communications Group