

Multiuser MIMO Industry Course

organised by the FP6-IST project



Nokia Research Center Helsinki
Itämerenkatu 11–13
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www.ist-mascot.org

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Announcement

The wireless industry has started to integrate MIMO techniques into existing multi-user cellular standards and to define new cellular standards based on MIMO. The goal of this industry course is to highlight, exemplify, and discuss concepts and techniques for multi-user MIMO communications both in cellular networks and in ad-hoc mode. This course will cover recent advances in multi-user MIMO techniques on the physical-, medium access-, and radio link control layers.



Multiuser MIMO Industry Course Programme

Friday November 16, 2007

Ari Hottinen, *Nokia, Finland*: 09:00
Welcome Message

Helmut Bölcskei, *ETH, Zurich*: 09:15-10:00
MIMO multiuser basics, multiple-access schemes, and multi-user space-time coding

Helmut Bölcskei, *ETH, Zurich*: 10:00-10:45
Feedback-based multi-user MIMO communication

Coffee break 10:45-11:00

Martin Schubert, *Heinrich Hertz Institut, Germany*: 11:00-12:30
Resource Allocation and Interference Functions

Lunch break 12:30-14:00

Emanuele Viterbo, *Università della Calabria, Italy*: 14:00-15:30
Algebraic tools for code design in MIMO systems

Coffee break 15:30-15:45

Christoph Mecklenbräuer, *FTW, Austria*: 16:00-16:45
MU-MIMO scheme performance evaluations using measured channels in specific environments

Christoph Mecklenbräuer, *FTW, Austria*: 16:45-17:30
MU-MIMO schemes in current standards for 3GPP Long Term Evolution, Wireless LAN, and WiMax.

Closing 17:30