



Network coding for resource-efficient operation of mobile clouds

The mobile communication architecture is changing dramatically, from formerly fully centralized systems, the mobile devices are getting connected among each other forming so called mobile clouds. One of the key technologies for mobile clouds is network coding. Network coding changes the way how mobile communication systems will be designed in the future. In contrast to source or channel coding, network coding is not end to end oriented, but allows on the fly recoding. The talk will advocate the need of network coding for mobile clouds.

Frank H. P. Fitzek is an Associate Professor in the department of Electronic Systems, **University of Aalborg, Denmark** heading the Future Vision group. He received his diploma (Dipl.-Ing.) degree in electrical engineering from the University of Technology - **Rheinisch-Westfälische Technische Hochschule (RWTH) - Aachen**, Germany, in 1997 and his Ph.D. (**Dr.-Ing.**) in **Electrical Engineering from the Technical University Berlin**, Germany in 2002 for quality of service support in wireless CDMA networks.



As a visiting student at the Arizona State University he conducted research in the field of video services over wireless networks. He co-founded the start-up company acticom GmbH in Berlin in 1999. In 2002 he was Adjunct Professor at the University of Ferrara, Italy giving lectures on wireless communications and conducting research on multi-hop networks. In 2005 he won the YRP award for the work on MIMO MDC and received the Young Elite Researcher Award of Denmark. He was selected to receive the NOKIA Champion Award in 2007 and 2008. In 2008 he was awarded the Nokia Achievement Award for his work on cooperative networks. His current research interests are in the areas of **wireless and mobile communication networks, mobile phone programming, cross layer as well as energy efficient protocol design and cooperative networking.**