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Invitation for a Guest Lecture

Graz, 19.01.2016

On behalf of the Signal Processing and Speech Communication Lab, I'm pleased to invite to a guest lecture by

Prof. Fredrik Tufvesson
Dept. of Electrical and Information Technology, Lund University
Lund, Sweden

entitled: "**Massive MIMO - from theory to practice**"

Friday, Jan. 22, 2016, 14:00,
Seminar Room IDEG134, Inffeldgasse 16c, ground floor.

Please forward this invitation to colleagues and friends.

I'm looking forward to seeing you at this event,

Assoc. Prof. Dr. Klaus Witrisal

Abstract:

Massive MIMO is one of the strong candidates to be included in next generation wireless systems and 5G. The technology offers the possibility to increase the spectral efficiency as well as the energy efficiency significantly compared to the solutions today, and we aim for an improvement by a factor ten in both. In this talk we will describe the opportunities and challenges of Massive MIMO from a signal processing and hardware perspective, with special emphasis on the experience we have got from the Lund University Massive MIMO test bed, LuMaMi. This test bed comprises 100 parallel coherent RF chains, feeding as many antenna elements, and can handle real time video streaming to up to ten simultaneous users in a dynamic environment.

Biography

Fredrik Tufvesson received his Ph.D. in 2000 from Lund University in Sweden. After two years at a startup company, he joined the department of Electrical and Information Technology at Lund University, where he is now professor of radio systems. His main research interests are channel modelling, measurements and characterization for wireless communication, with applications in various areas such as massive MIMO, UWB, mm wave communication, distributed antenna systems, vehicular communication systems and radio based positioning. Fredrik is heading the wireless propagation group at the department and has authored and co-authored around 60 journal papers and 120 conference papers.