

Halmstad Colloquium

Seminar, September 1, 2016, 13:15

School of Information Technology

The 5G Frontier; mm-Waves

Michael Faulkner,

Professor in Telecommunications, Victoria University, Australia

With the introduction of the fourth generation (4G) of wireless equipment almost complete, the focus of the research community has switched to the fifth generation, targeted for commercialisation in 2020. Increased data rates, a renewed focus on the internet-of-things and the scarcity of spectrum will force operators into higher frequency bands despite deteriorating performance in terms of coverage. The new mm-wave bands under consideration offer both the opportunity for wider bandwidths and the challenge of providing the coverage. Repeaters might be necessary to extend coverage zones. A number of research organisations are doing measurements to better understand how the mm-wave bands behave in different environments. The presentation will describe the mm-wave measurement program currently underway at Victoria University, which aims to identify performance issues under local conditions.



Michael Faulkner

Professor Michael Faulkner received a B.Sc.(Eng) from London University, UK, and a Ph.D. (1993) from the University of Technology, Sydney, Australia. He is professor in Telecommunications at Victoria University, Australia. His original research interest was in the application of (digital) signal processing techniques to the correction of the non-ideal characteristics of practical RF components; for example, quadrature modulators and power amplifiers. He has given tutorials, seminars, and invited papers on this topic. Since then his interests have broadened to encompass all physical layer aspects of wireless systems, with an emphasis on implementation. He has supervised research projects in radio propagation measurements (wideband channel sounding, direction of arrival etc.), MIMO, transceiver algorithms, architectures and circuits, physical layer signal processing, and modulation. His research interests cover all areas of wireless system design and his current activities are focused on fifth generation wireless technologies. He has authored or co-authored over 100 publications and is regularly involved with industry sponsored research.

Wigforssalen, Visionen,
September 1, 13:15. Welcome!

The Halmstad Colloquium is a distinguished speaker series. The prominent speakers are invited from universities around the world to talk about topics of interest for the researchers within our research environment Halmstad Embedded and Intelligent systems research. The Halmstad Colloquium is hosted by the School of Information Technology.

