

Fundamental Limits in Wireless Communication

By
Prof. Alex Grant
Research Professor of Information Theory
NICTA Fellow

Thursday 20th October 3:30pm–4:30pm
Technology Park Conference Centre
Mawson Lakes Boulevard
MAWSON LAKES, SA

Abstract

There is ever increasing demand for wireless communications technologies, ranging from mobile telephony to local area networks such as 802.11 and Bluetooth. This demand is driven by the convenience of these technologies, and the new applications services and that they enable. Wireless communications is characterized by limited available frequency spectrum, low transmission powers and limited device processing capability. What do these limitations mean for the future of wireless communications? This talk will investigate the fundamental limits of wireless communications and describe some of the recent advances that will have an impact on future wireless technologies.

About the Speaker

Alex Grant received the B.E. and Ph.D. degrees from the University of South Australia in 1993 and 1996 respectively. Since March 1998 he has been with the Institute for Telecommunication Research, University of South Australia.

He served as Technical Program Chair for the 2001 IEEE Information Theory Workshop, and as General Co-Chair for the 2005 IEEE International Symposium on Information Theory. Prof. Grant has published a book on multi-user communications, various technical papers and patents, and is supported by several Australian Research Council grants and industry-sponsored projects. He is a National ICT Australia Fellow, and a Principal Fellow at the University of Melbourne. Prof. Grant is co-founder of Cohda Wireless, an Adelaide-based mobile broadband company. He was awarded a 2004 Tall Poppy award from the Australian Institute of Political Science.

Refreshments will be served

Bookings Essential

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Seminar Venue:

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