



IEEE Macquarie University Student Branch/MTT-S Chapter IEEE NSW AP/MTT Joint Chapter

IEEE Lecture By Professor Dirk Manteuffel University of Kiel, Germany

Date : Monday, 10 March 2014
Time : 11:00 am to 12:00 pm
Location : Room 357 Building E6A,
Macquarie University NSW 2109

Further Information:

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Characteristic Mode Based Antenna Design – A Straight Forward Approach to Small Form Factor Antenna Integration

When integrating antennas into the chassis of the application the performance is dominated by the integration impairments. Often, excitation of the chassis can be utilized to achieve both, good antenna performance and a small form factor.

The Theory of Characteristic Modes (TCM) enables profound understanding on how such structures work and it can be utilized as a valuable tool for straight forward design.

The talk introduces to the TCM and shows how it can be used to design antennas for small mobile terminals, automotive applications and massive multi antenna systems for 100 GBit+ mobile communication systems.

Upcoming Events

Friday, 21 March 2014 :

IEEE AP-Society Distinguished Lecturer Professor Per-Simon Kildal



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Professor Dirk Manteuffel's Biography

Dirk Manteuffel was born in Issum, Germany in 1970. He received the Dipl.-Ing. degree in electrical engineering from Duisburg University in 1998 and the Dr.-Ing. degree from the University of Duisburg-Essen in 2002. In 2004 he received the young scientist award of the Vodafone foundation for science for his research on the analysis and design of integrated mobile phone antennas with special emphasis on the interaction with the user.

From 1998 to 2009 he joint IMST in Germany. As a project manager he was responsible for industrial antenna development and advanced projects in the field of antennas and EM modeling.

Since 2009 he is a full professor of wireless communications and a director of the Institute of Electrical- and Information Engineering at the Christian-Albrechts-University of Kiel, Germany. His research interests are antenna integration and EM modeling for mobile communications and biomedical applications.

Since 2005 he is a member of the board of the ESoA–European School of Antennas. In 2009 he has been appointed to join the technical committee on antennas of the ITG - German Information Technology Society and since 2011 he is the chairman of the EurAAP working group on Small Antennas and a delegate to the EurAAP–European Association onAntennas and Propagation. Since 2012 he is a director of the EurAAP.

Prof. Manteuffel is inventor of 6 national and international patents and author and co-author of more than 70 scientific publications including two books.