Posting Detail

Title :	(Reminder) Distinguished Lecture on Finite Element Analysis of Antennas and Phased Arrays in the Time Domain By Professor Jian-Ming Jin, University of Illinois at Urbana-Champaign
Body :	**Department of Electronic Engineering** **&** **State Key Laboratory of Millimeter Waves (Hong Kong)** **IEEE AP/MTT HK Joint Chapter** **Distinguished Lecture on** **Finite Element Analysis of Antennas and Phased Arrays in the Time Domain** **By** **Professor Jian-Ming Jin** **Center for Computational Electromagnetics,** **Department of Electrical and Computer Engineering** **University of Illinois at Urbana-Champaign** ***Date : 10 March 2011 (Thursday)*** ***Time : 11:00 a.m. – 12:30 a.m.*** ***Venue : Room G 6302, 6/F, Green Zone, Academic Building, City University of Hong Kong*** ***Abstract*** Antennas play a critical role in wireless communication, remote sensing, space exploration, defense, electronic warfare, and many other electronic systems. Quantitative antenna analysis is important to the design and optimization of antennas, especially complex antennas that are not easily designed by intuitive approaches, such as ultra-wideband antennas and phased arrays designed with novel materials. In this talk, we will provide an overview on the development and application of the time-domain finite element method for the broadband analysis of antennas and phased arrays. After a brief introduction of the time-domain finite element method for solving Maxwell's equations, we will discuss the major challenges for the time-domain finite element analysis of antenna and phased-array problems, which include (1) truncation of open free space, (2) modeling of antenna feeds and network, (3) modeling of novel dispersive materials, (4) modeling of large antennas and finite phased arrays, and (5) modeling of infinite periodic phased arrays. For each challenge, we will describe the state-of-the-art solutions and demonstrate their practical applications. ***Biography*** Jian-Ming Jin is Y. T. Lo Chair Professor in Electrical and Computer Engineering and Director of the Electromagnetics Laboratory and Center for Computational Electromagnetics at the University of Illinois at Urbana-Champaign. He has authored and co-authored over 200 papers in refereed journals and 21 book chapters. He has also authored The Finite Element Method in Electromagnetics (New York: Wiley, 1st edition 1993, 2nd edition 2002), Electromagnetic Analysis and Design in Magnetic Resonance Imaging (Boca Raton, FL: CRC, 1998), Theory and Computation of Electromagnetic Fields (Hoboken, NJ: Wiley, 2010), co-authored Computation of Special Functions (New York: Wiley, 1996), Finite Element Analysis of Antennas and Arrays (Hoboken, NJ: Wiley, 2008), and co-edited Fast and Efficient Algorithms in Computational Electromagnetics (Norwood, MA: Artech, 2001). His name often appears in the University of Illinois's List of Excellent Instructors. He was elected by ISI as one of the world's most cited authors in 2002. Dr. Jin is a Fellow of IEEE and a recipient of the 1994 National Science Foundation Young Investigator Award and the 1995 Office of Naval Research Young Investigator Award. He also received the 1997 Xerox Junior and the 2000 Xerox Senior Research Awards from the University of Illinois, and was appointed as the first Henry Magnuski Outstanding Young Scholar in 1998 and later as Sony Scholar in 2005. He was appointed as a Distinguished Visiting Professor in the Air Force Research Laboratory in 1999. ****** ALL ARE WELCOME ****** ***Enquiries: Prof. Chi Hou Chan, Department of Electronic Engineering*** ***Tel.: 3442 9360 Fax: 3442 0353 e-mail: eechic@cityu.edu.hk***
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Category :	Academic Seminar
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