

IEEE AP-S Distinguished Lecturer 講演会

IEEE AP-S Tokyo Chapter では、IEEE AP-S Distinguished Lecturer である Prof. Qing Huo Liu (Duke University, USA) が来日される機会に、計算電磁気学とその応用に関するご講演をお願いしました。貴重な機会ですので、是非ご参集ください。

なお、参加費は無料ですが、ご参加をご希望の方は下記連絡先まで電子メールにて参加申し込みください。

題 目 : Multiscale Computational Electromagnetics and Applications

講演者 : Prof. Qing Huo Liu (Duke University, USA)

日 時 : 2016年8月27日(土) 16:00~17:15

場 所 : 中央大学後楽園キャンパス 6号館 7階 6701号室



【講演アブストラクト】

Electromagnetic sensing and system-level design problems are often multiscale and very challenging to solve. They remain a significant barrier to system-level sensing and design optimization for a foreseeable future. Such multiscale problems often contain three electrical scales, i.e., the fine scale (geometrical feature size much smaller than a wavelength), the coarse scale (geometrical feature size greater than a wavelength), and the intermediate scale between the two extremes. Most existing commercial solvers are based on single methodologies (such as finite element method or finite-difference time-domain method), and are unable to solve large multiscale problems. We will present our recent work in solving realistic multiscale system-level EM design simulation problems in time domain. The discontinuous Galerkin method is used as the fundamental framework for interfacing multiple scales with finite-element method, spectral element method, and finite difference method. Numerical results show significant advantages of the multiscale method.

【講演者略歴】

Qing Huo Liu (S'88-M'89-SM'94-F'05) received his B.S. and M.S. degrees in physics from Xiamen University in 1983 and 1986, respectively, and Ph.D. degree in electrical engineering from the University of Illinois at Urbana-Champaign in 1989. His research interests include computational electromagnetics and acoustics, inverse problems, and their applications in geophysics, nanophotonics, and biomedical imaging. He has published over 300 refereed journal papers and 450 conference papers in conference proceedings, and his H-index is 48 (Google Scholar). He was with the Electromagnetics Laboratory at the University of Illinois at Urbana-Champaign as a Research Assistant from September 1986 to December 1988, and as a Postdoctoral Research Associate from January 1989 to February 1990. He was a Research Scientist and Program Leader with Schlumberger-Doll Research, Ridgefield, CT from 1990 to 1995. From 1996 to May 1999 he was an Associate Professor with New Mexico State University. Since June 1999 he has been with Duke University where he is now a Professor of Electrical and Computer Engineering.

Dr. Liu is a Fellow of the IEEE, Fellow of the Acoustical Society of America, Fellow of Electromagnetics Academy, and Fellow of the Optical Society of America. Currently he serves as the founding Editor in Chief of the IEEE Journal on Multiscale and Multiphysics Computational Techniques, the Deputy Editor in Chief of Progress in Electromagnetics Research, an Associate Editor for IEEE Transactions on Geoscience and Remote Sensing, and an Editor for the Journal of Computational Acoustics. He was recently a Guest Editor in Chief of the Proceedings of the IEEE for a 2013 special issue on large-scale electromagnetics computation and applications. He received the 1996 Presidential Early Career Award for Scientists and Engineers (PECASE) from the White House, the 1996 Early Career Research Award from the Environmental Protection Agency, and the 1997 CAREER Award from the National Science Foundation. He serves as an IEEE Antennas and Propagation Society Distinguished Lecturer for 2014-2016.

同日 14:30~15:45 に中央大学理工学研究所主催特別講演会を開催します(講演者:Prof. Vladimir Okhmatovski (University of Manitoba, Canada), 講演題目 : Novel Single-Source Surface Integral Equation for Electromagnetics). 併せてご参加下さい。

連絡先 : IEEE AP-S Tokyo Chapter

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(迷惑メール防止のため、@を(a)にしています。)