IEEE MTT-S IMS 2014 WFE Workshop on Recent Advances in Space Mapping Modeling and Optimization

ABSTRACT

This year marks the 21st anniversary of the birth of space mapping technology. Recently, new understanding and development of space mapping concepts have been ballooning. New applications have been expanding in the traditional microwave areas and are quickly spilling into multi-physics and multi-disciplinary areas. This workshop invites design and modeling experts to recap the latest development and applications in space mapping and related techniques. The space mapping technology is both a modeling and a design optimization tool. It strategically enhances a "coarse" (ideal or low-fidelity) model to the accuracy of a "fine" (practical or high-fidelity) model with very few fine model training points. It exploits coarse model knowledge and finds the optimal design of a fine model using very few fine model simulations. Examples from different fields are provided to illustrate space mapping and related technologies working effectively in diverse applications.

Workshop Code: WFE Day: Friday, June 6, 2014

Time: 0800-1700

Location: Tampa Bay, Florida

Organizers:

Qingsha S. Cheng, McMaster University, Canada, chengq@mcmaster.ca John W. Bandler, McMaster University/Bandler Corporation, Canada, bandler@mcmaster.ca

Sponsors:

MTT-1, MTT-8, and MTT-15

Speakers:

Peter Aaen, University of Surrey, UK John W. Bandler, McMaster University/Bandler Corporation, Canada Vicente Boria, Technical University of Valencia, Spain Qingsha S. Cheng, McMaster University, Canada Slawomir Koziel, Reykjavík University, Iceland Peter Thoma, CST, Germany Ke-Li Wu, The Chinese University of Hong Kong, Hong Kong Lei Zhang, Freescale Semiconductor Inc., USA

Q.J. Zhang, Carleton University, Canada/Tianjin University, China