

Day 0
Sunday, July 19, 2009

19:00-21:30

Welcome Reception

Day 1
Monday, July 20, 2009

09:00

Opening Remarks

SESSION 1
Chair: J. M. Taboada

09:05

Zeroth-Order Divergence-Complete Discretizations of the EFIE at Very Low Frequencies
E. Ubeda, J. M. Tamayo, and J. M. Rius
Antenna Lab, Department of Signal Theory and Communications,
Universitat Politècnica de Catalunya, Spain

09:30

Overdetermined Current and Charge Integral Equations of Averaged Normalized Fields
M. Taskinen
Department of Radio Science and Engineering,
Helsinki University of Technology, Finland

09:55

Multi-Resolution Approach to Three-Dimensional Method-of-Moments Problems
F. Vipiana (1,2), M. A. Francavilla (2), F. P. Andriulli (2), P. Pirinoli (2),
and G. Vecchi (2)
(1) Antenna and EMC Lab (LACE), Istituto Superiore Mario Boella (ISMB), Italy
(2) Antenna and EMC Lab (LACE), Politecnico di Torino, Italy

10:20-10:35

Coffee Break

SESSION 2
Chair: M. Taskinen

10:35

Parallel FMM-FFT Solver for the Analysis of Hundreds of Millions of Unknowns
J. M. Taboada (1), L. Landesa (1), F. Obelleiro (2), J. L. Rodriguez (2),
J. M. Bertolo (2), J. C. Mourino (3), and A. Gomez (3)
(1) Dept. Tecnologías de los Computadores y de las Comunicaciones, Escuela
Politécnica, Universidad de Extremadura, Spain
(2) Dept. Teoría de la Señal y de las Comunicaciones, E.T.S.I. Telecomunicación
Universidad de Vigo, Spain
(3) Supercomputing Center of Galicia, CESGA, Spain

11:00

Fast and Accurate Solutions of Extremely Large Scattering Problems Involving Three-Dimensional Canonical and Complicated Objects
Ö. Ergül (1,2) and L. Gürel (1,2)
(1) Department of Electrical and Electronics Engineering, Bilkent University, Turkey
(2) Computational Electromagnetics Research Center (BiLCEM), Bilkent University,
Turkey

11:25

Design of Accurate and Efficient Boundary-Integral-Based Solvers for the Study of Electromagnetic Scattering
K. Cools, I. Bogaert, J. Fostier, J. Peeters, and D. De Zutter
Department of Information Technology, Ghent University, Belgium

11:50-12:00

Discussion

12:00-13:25

Break

Social Activity

13:30-18:00

Izmir City Tour: Please join us for a guided tour of Izmir.

20:00-22:30

Workshop Dinner (Kordon Hotel)

Day 2
Tuesday, July 21, 2009

SESSION 3
Chair: E. Ubeda

09:00

Numerical Investigation of Rectangular Dielectric Resonator Antenna Array Fed by Dielectric Image Line
H. Dashti (1), M. H. Neshati (2), F. Mohanna (1), and F. Kazemi (1)
(1) Electrical Department, Sistan and Baluchestan University, Iran
(2) Electrical Department, Ferdowsi University of Mashhad, Iran

09:25

Accurate Evaluation of Mutual Coupling for Array Calibration
S. Henault and Y. M. M. Antar
Royal Military College of Canada, Canada

09:50

A Parallel Hybrid Sparse Linear System Solver
M. Manguoglu
Purdue University, USA

10:15

Approximate Schur Preconditioners for Efficient Solutions of Dielectric Problems Formulated with Surface Integral Equations
T. Malas (1,2) and L. Gürel (1,2)
(1) Department of Electrical and Electronics Engineering, Bilkent University, Turkey
(2) Computational Electromagnetics Research Center (BiLCEM), Bilkent University,
Turkey

10:40-10:55

Coffee Break

PLENARY TALK

10:55-11:50

Computational Electromagnetics: Casimir Force, Multiscale Calculations, Coordinate Stretching
W. C. Chew (1,2), J. L. Xiong (1,2), Z. G. Qian (2,3), M. K. Li (4),
A. J. Hesford (5), and F. L. Teixeira (6)
(1) The University of Hong Kong, PR China
(2) University of Illinois, USA
(3) Currently with Apache Design Solutions, USA
(4) Schlumberger-Doll Research Center, USA
(5) University of Rochester, USA
(6) Ohio State University, USA

11:50-12:00

Discussion

12:00-13:25

Break

Social Activity

13:30-19:30

Trip to Çeşme and Alaçatı: Please bring your swim suits. We will go to a beach club and swim in the Aegean Sea.

Day 4
Thursday, July 23, 2009
9:25-18:30
Trip to Ephesus
Please join us for this all-day event including a guided tour of Virgin Mary Church, Ephesus, and Sirince Village.

Day 3
Wednesday, July 22, 2009

SESSION 4 Chair: K. Sertel	08:50	Dual-Axis Sensor Design for Magnetometer Applications G. Dekoulis Space Plasma Environment and Radio Science Group, Department of Communication Systems, Lancaster University, UK
	09:15	Three-Dimensional Electromagnetic Scattering from Flat Plates by Using Sinc-Type Basis Functions in Method of Moments B. Ozbakis (1), T. Oguzer (2), and A. Kustepeli (1) (1) Izmir Institute of Technology, Turkey (2) Dokuz Eylul University, Turkey
	09:40	Rigorous Solution by Analytical Regularization Method to the Problem of 2D E-polarized Wave Diffraction by Set of PEC Surfaces H. Yiğit (1), F. Dikmen (1), O. A. Suvorova (1,2), and Y. A. Tuchkin (1,2) (1) Electronics Engineering Department, Gebze Institute of Technology, Turkey (2) Institute of Radiophysics and Electronics, Ukrainian National Academy of Sciences, Ukraine
	10:05	Hybridizing Physical Optics with MLFMA for Efficient Scattering Computations of Three-Dimensional Complex Targets A. Manyas (1,2), Ö. Ergül (1,2), and L. Gürel (1,2) (1) Department of Electrical and Electronics Engineering, Bilkent University, Turkey (2) Computational Electromagnetics Research Center (BiLCEM), Bilkent University, Turkey
	10:30-10:45	Coffee Break
SESSION 5 Chair: G. Vecchi	10:45	Power Decomposition Method for Compression of the Electric-Field Integral Equation L. Landesa, G. Gajardo-Silva, and J. M. Taboada Computer and Communications Sciences Department, Escuela Politecnica, University of Extremadura, Spain
	11:10	Fully Overlapping Domain Decomposition for Fast Optimization of Small Antennas in Large-Scale Composite Media T. Peng, K. Sertel, and J. L. Volakis ElectroScience Laboratory, The Ohio State University, USA
	11:35	Analysis of Photonic-Crystal Problems with MLFMA and Approximate Schur Preconditioners Ö. Ergül (1,2), T. Malas (1,2), S. Kılınc (1,2), S. Sarıtaş (1,2), and L. Gürel (1,2) (1) Department of Electrical and Electronics Engineering, Bilkent University, Turkey (2) Computational Electromagnetics Research Center (BiLCEM), Bilkent University, Turkey
	12:00-12:05	Concluding Remarks
	12:05-13:25	Break
Social Activity	13:30-18:30	Trip to Bergama: We will visit the ancient Greek city of Pergamon.