

Commission B, Fields and Waves
Activity report
August 2010–October 2010

1 EMTS2010

2010 International Symposium on Electromagnetic Theory

This triennial symposium is - next to the General Assemblies of U.R.S.I - the major scientific event of our International Commission B. The 2010 EMT-S comes as kind of an anniversary being the 20th in a series that started in 1953 in Toronto, Canada, with the most recent ones 2004 in Pisa, Italy, and 2007 in Ottawa, Canada. The decision for Berlin was made by the Commission B Business Meetings during the 2005 General Assembly in New Delhi, India, upon a bid that was carefully prepared by the German Commission B members.

1.1 Statistics

Date: 16–19 August, 2010

Venue: Berlin Steigenberger, Berlin, Germany

Web page: <http://www.emts2010.de/>

Number of oral presentations: 268

Number of poster presentations: 24

Oral contributions from Japan: 19

Poster contributions from Japan: 4

1.2 Special sessions

- S1 Antennas for Imaging Systems at Terahertz Frequencies
- S2 Nonstandard Boundary Conditions in Electromagnetics
- S3 Analytic Identities and Limitations in Electromagnetic Theory
- S4 Electromagnetic Subsurface/Underground Sensing
- S5 Theoretical Aspects of Discrete Field Formulations
- S6 Beam Methods
- S7 Estimation and Optimization under Uncertainties for Diffraction Problems
- S8 Nonlinear Methods for Inverse Scattering
- S9 Novel Mathematical Methods in Electromagnetics
- S10 Numerical Methods: Integral Equations
- S11 EM Engineering
- S12 Electromagnetics for Short Range Communications
- S13 Micromodeling and Characterization of Composite Materials
- S14 Electromagnetic Methods in Nondestructive Evaluation
- S15 Techniques for Solving Multi-Scale and Real-World Problems in Computational Electromagnetics
- S16 In Memoriam Femke Olyslager

1.3 Regular sessions

- R1 Electromagnetic Theory
- R2 Mathematical Modeling of EM Problems
- R3 Solution to Canonical Problems
- R4 Scattering: Numerical Methods
- R5 High-Frequency Methods
- R6 Inverse Scattering and Imaging
- R7 Propagation and Scattering in Layered Structures
- R8 Random Media and Rough Surfaces
- R9 Complex Media
- R10 Numerical Methods: General Aspects
- R11 Hybrid Methods
- R12 Numerical Time Domain Methods
- R13 Guided Waves
- R14 Interaction of EMF with Biological Tissue
- R15 EMC/EMI
- R16 Antenna Arrays
- R17 Smart Antennas
- R18 UWB Antennas
- R19 Electrically Small Antennas
- R20 Antennas and Propagation for Car-to-Car Communication

2 Future Conferences

2.1 Japanese EMT Symposium 2010

The 39th Japanese EMT Symposium

Date: 11–13 November, 2011

Venue: Hotel Listel-Inawashiro, Fukushima, Japan

Web page: <http://www.ieice.or.jp/es/emt/jpn/EMT10/emt-11-emt-sympo.pdf>

2.2 ISAP2010

Date: 23–26 November, 2010

Venue: The Venetian Macao-Resort-Hotel, Macao, China

Web page: <http://www.isap2010.org/>

2.3 PIERS2011, Morocco

The 29th PIERS 2011 in Marrakesh, Morocco

Date: 20–23 March, 2011

Venue: Mansour Eddahbi Hotel & Conference Center, Marrakesh, Morocco

Web page: <http://piers.mit.edu/piers2011Marrakesh/>

2.4 EuCAP2011

The 5th European Conference on Antennas and Propagation

Date: 11–15 April, 2011

Venue: EUR Congressi in Rome, Italy

Web page: <http://www.eucap2011.org/>

2.5 APS/URSI2011

The 2011 IEEE International Symposium on Antennas and Propagation and USNC/URSI National Radio Science Meeting

Date: 2–6 July, 2011

Venue: The Spokane Convention Center, Spokane, Washington, U.S.A.

Web page: <http://www.apsursi2011.org/>