



**Report on the Business Meetings of
Commission B
during the
XXXth URSI General Assembly and
Scientific Symposium
Istanbul, Turkey, August 13-20, 2011**

Three Commission B Business Meetings were held on Monday, August 15th, Wednesday, August 17th, and Friday, August 19th.

Three Commission B papers were selected for the final session of the Second International URSI Student Paper Competition:

1. Y. Kaganowsky, E. Heyman, "Spectral Analysis of the Airy Pulsed Beam"
2. G. Safonova, E. Vynogradova, "Rigorous Approach to Analysis of 2-D Electrostatic-Field Problems for Multi-Conductor Systems"
3. K. Stavrakakis, T. Vittig, W. Ackermann, T. Weiland, "Model Order Reduction Methods for Multivariate Parameterized Dynamical Systems"

Yan Kaganowsky (Israel) and Kynthia Stavrakakis (Germany) were awarded the second and fifth prize, respectively. G. Sofonova received an Honorable Mention.

During the GASS Opening Ceremony, Prof. Ehud Heyman (Israel) was awarded the Balthasar Van der Pol Gold Medal. The Issac Koga Gold Medal was awarded to Prof. Andrea Alù (USA).

Four candidates for Vice-Chair have been nominated:

Kazua Kobayashi, Japan

Ari Sihvola, Finland

Don Wilton, USA

Ayan Altintas, Turkey

Ari Sihvola, Finland, has been elected (and approved by the Council).

Two bids to hold the triennial URSI Commission B International Symposium on Electromagnetic Theory (EMTS) in 2016 have been presented: Helsinki, Finland and Versailles, France. Helsinki has been elected.

The 2013 URSI Commission B EMTS will be held in Hiroshima, Japan. Symposium location will be the International Conference Center Hiroshima (ICCH) located in the Peace Memorial Park, downtown Hiroshima.

The terms or reference of Commission B have been slightly modified during the Istanbul GASS.

Commission B paper statistics for GASS 2011:

- Oral Session Papers 95
- Poster Session Papers 98
- Total Accepted Papers 193

Oral Sessions (B-Core)

- B01 – Electromagnetic Theory, 4 papers
- B03 – Hybrid Methods (in memory of Robert G. Kouyoumjian), 11 papers
- B04 – Electromagnetic Field Transformations for Measurements and Numerical Methods, 6 papers
- B05 – Theoretical and Numerical Issues in Electromagnetics, 6 papers

- B06 – Multiscale Modeling and Applications to Composite Materials, 7 papers
- B07 – Adaptive Antennas, 10 papers
- B10 – Beam Methods, 6 papers
- B11 – Inverse Scattering and Imaging, 10 papers
- B12 – Novel Mathematical Methods in Electromagnetics, 7 papers

Oral Sessions (Joint Core)

- BD1 – Metamaterial Theory, 10 papers
- BD2 – Numerical Techniques for Multi-Physics Electromagnetics, 11 papers
- BJ – Very Large Antenna Arrays for Radio Astronomy, 6 papers

Oral Sessions (Joint from other Commissions)

- AB1 – Antenna Measurement, 7 papers
- AB2 – Antenna Measurement, 10 papers
- AB3 – Antenna Measurement, 7 papers
- ABD – Low Noise Microwave Generation, 7 papers
- CB – Antenna Channel Interactions for Future Wireless Communications, 6 papers
- CBD – Vehicular Communications, 3 papers
- CHGBDJK – Solar Power Satellites and Wireless Power Transmission, 10 papers
- DB1 – Modeling of High-Frequency Devices and Circuits, 10 papers
- DB2 – Plasmonics, 7 papers
- DB3 – Metamaterial Applications, 7 papers
- DBC – Signal Processing Antennas, 6 papers
- EB – Electromagnetic Modelling for EMC, 10 papers
- KB – Uncertainty Management in Numerical Calculation and EM Field Dosimetry, 6 papers
- KBE – Non-Ionizing Electromagnetic Breast Imaging, 9 papers

Poster Sessions

- BP1, 48 papers
- BP2, 49 papers

Tutorial

Passive and Active Metamaterial Constructs and Their Impact on Electrically Small Radiating and Scattering Systems

by R. W. Ziolkowsky, University of Arizona, United States

The triennial report given by Commission B Chair Karl J. Langenberg covered Meetings and Symposia (EMTS 2010, Berlin, Germany; the first German-Israeli Workshop on “Advances in Electromagnetics”; URSI GASS 2011, Istanbul, Turkey) and Emerging Issues in Commission B (Young Scientist support, Commission and URSI visibility, new scientific research areas, new applied research areas). A specific working group was formed in the last business meeting (Friday, August 19th) with the objective of organizing a first URSI Commission B School for Young Scientists to be held in combination with the 2013 Electromagnetic Theory Symposium in Hiroshima, Japan.