

## CALL FOR SPECIAL SESSIONS

The IEEE EMC Society seeks proposals for Special Sessions to be presented at the 2010 IEEE International Symposium on Electromagnetic Compatibility. Proposals on all aspects of EMC and related technologies that are affected by EMC are invited. These include new and evolving technology that will have impact on EMC design, predication, and control. New technologies, such as increasingly-complex radio transmitters push the boundaries of EMC.

Organizers are encouraged to submit abstracts and presentations on topics not typically included in other EMC sessions.

*Proposals Accepted: Nov 1, 2009 - Jan 10, 2010*

*Notification of Acceptance: Mar 12, 2010*

*Final Submissions Due: April 30, 2010*

## CALL FOR WORKSHOPS AND TUTORIALS

The IEEE EMC Society is seeking proposals for Workshops and Tutorials to be presented at the 2010 IEEE International Symposium on Electromagnetic Compatibility. We invite proposals on all aspects of EMC and related technologies that are affected by EMC. These sessions are intended to delve into the depths of EMC phenomenology, but have practical applications to design, specifications, system planning and related engineering constructs. Specific sessions dealing with testing, troubleshooting, effects and problem solving are of particular interest.

**Proposals will be reviewed and evaluated for**

- Relevance
- Importance of topic
- Novelty and originality
- Technical depth
- Readability and clarity of proposal

These sessions are held on the Monday and Friday of the symposium.

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**emc 2010**  
Navigating EMC



**emc 2010**

**Navigating EMC**  
Fort Lauderdale  
July 25-30, 2010

The 2010 IEEE International Symposium on EMC solicits submissions for technical papers and sessions.

There are a wide variety of formats to submit your work for presentation at the 2010 Symposium. Review the formats to find out the best method to share your EMC learning and experience.

## GENERAL INFORMATION

Submission Evaluations will be based on the following criteria:

**Importance of Topic:** Does it have direct significance to the EMC community?

**Technical Sophistication and Depth:** Does it present information that is a significant contribution, advancement, application or refinement of the state of the art? Does it expose the reader to a higher knowledge level than currently available from other sources? Is it clear that the work has been substantially completed or is the submission an interim report of progress on a long term project?

**Readability, Clarity and Presentation:** Is the value of the submission clearly defined? Is the material written in clear and concise English, with topics presented in an organized and logical manner?

**Novelty and Originality:** Does it propose a new and unique concept or expand on an existing premise from a unique point of view? Does it present new information on an EMC issue that is still in developmental stage?

**Camera-Ready Paper:** Authors of accepted Preliminary Manuscripts will receive instructions for preparing the final, camera ready paper for the symposium record (not to exceed 6 pages including the title, author(s), abstract, results and figures/diagrams).

**Paper Presenter:** All accepted submissions must be presented by the authors or their designated presenters.

Authors must be pre-registered for the 2010 EMC Symposium prior to submitting their final paper. All submissions through [emc2010.org](http://emc2010.org)

## CALL FOR PAPERS

Authors, join your colleagues and share your insights in Fort Lauderdale, Florida for the 2010 IEEE International Symposium on Electromagnetic Compatibility. Your paper will be shared with thousands in the EMC Community and across a wide array of disciplines that look to the EMC Society for technical information.

### Topics of Interest Include:

- EMC Management
- EMC Measurements
- EMC Environment
- EM Interference
- High Power Electronics
- Spectrum Management
- Nonsinusoidal Fields
- EM Product Safety
- Computational Electromagnetics
- Signal Integrity
- Nanotechnology

*Preliminary Full Papers: Nov 1, 2009 – Jan 10, 2010*

*Notification of Acceptance: March 12, 2010*

*Final Submissions Due: April 30, 2010*

Six-page paper maximum, 20 minute oral presentation, or visual presentation on a 3' x 4' panel.

Submissions through: [emc2010.org](http://emc2010.org)

## CALL FOR EMC COMPUTER MODELING AND SIMULATION DEMONSTRATIONS

Presenters provide fundamental EMC modeling approaches and simulation methods are illustrated through a series of interactive computer demonstrations. Various computational electromagnetic (CEM) modeling techniques will be demonstrated to show how specific EMC problems can be solved. These include the application of the moment method (MoM), uniform theory of diffraction (UTD) and variations on the asymptotic ray tracing method, finite difference time-domain (FDTD), finite element modeling (FEM), transmission line (TL) theory, and other useful methods.

### Topics of Interest Include:

Shielding Effectiveness Simulation  
Using the FDTD Method

Radiation Through Apertures, Gaskets and Joints

Large Complex System Analysis Using MLFMA

Modeling of Simultaneous Switching Noise  
in High Speed Systems

Power Bus Resonance and Associated EMI  
Simulations for PCBs

EMC Simulation Techniques for  
Printed Circuit Boards

FDTD Modeling of DC Power-Busses  
Emission Environment Modeling and Analysis  
FEM Analysis of Printed Circuit Board Signal Coupling

*Proposals Due: April 30, 2010*

*Notification of Acceptance: May 30, 2010*

## BEST STUDENT PAPER AWARD

Graduate and undergraduate authors are eligible for the Best Student Paper Award. The student must be the primary author. The professor should attach a note to the paper to certify that the submission is primarily the work of his/her student(s). Follow the submission schedule for Call for Papers.

## CALL FOR EMC EXPERIMENTS AND DEMONSTRATIONS

Presenters provide experiments focused on electromagnetic coupling phenomena and effects, EMC measurement and troubleshooting methods. Exciting experiments demonstrate the effects of PC board radiation coupling; component-cable crosstalk; grounding and shielding strategies; spectral analysis techniques using test hardware; effective EMC test methods and practices; use of EMC instrumentation to measure interference at the device or component level; and the role of EMC standards as part of overall measurement practices. The demonstrations show how in most cases, fairly simple test hardware can be used to measure a range of electromagnetic effects.

### Topics of Interest Include:

Application of magnetic pickup loops  
and current probes

Transmission-line effects on PCBs

Coupling and multi-conductor transmission lines

Use of ferrites for EMI control

Measurement versus calculation of signal spectra

Minimizing magnetic field susceptibility

Measurement and control of EMI in  
spread spectrum systems

Measurement of common versus  
differential mode coupling

LISNs and parasitics

Electrostatic discharge phenomena

Effects of clock frequencies

*Proposals Due: April 30, 2010*

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