



2010 IEEE International Frequency Control Symposium

Tutorials on 1 June 2010, Symposium 2 - 4 June 2010



**The Marriott Newport Beach Hotel
Newport Beach, California, USA**

*Sponsored by the IEEE Ultrasonics, Ferroelectrics &
Frequency Control Society*

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Call for Papers

Abstract Submission Deadline: Friday, January 29, 2010

The 64th consecutive meeting of the Frequency Control Symposium will be held at the The Marriott Newport Beach Hotel, Newport Beach, CA, USA.

Authors are invited to submit papers dealing with recent and original work of interest to the frequency control and timing communities in the following subject categories:

Group 1: Materials, Resonators, & Resonator Circuits

- A. Fundamental Properties of Materials
- B. Micro- and Macro-Fabrication Technology for Resonators and Filters
- C. Theory, Design, and Performance of Resonators and Filters, including BAW, FBAR, MEMS, NEMS, SAW, and others
- D. Reconfigurable Frequency Control Circuits, e.g., Arrays, Channelizers

Group 2: Oscillators, Synthesizers, Noise, & Circuit Techniques

- A. Oscillators – BAW, MEMS, and SAW
- B. Oscillators - Microwave to Optical
- C. Heterogeneously Integrated Miniature Oscillators, e.g., Single-Chip
- D. Synthesizers, Multi-Resonator Oscillators, and Other Circuitry
- E. Noise Phenomena and Aging
- F. Measurements and Specifications
- G. Timing Error in Digital Systems and Applications

Group 3: Optical & Microwave Frequency Standards

- A. Optical Atomic Standards and Frequency Combs
- B. Microwave Atomic Frequency Standards
- C. Atomic Clocks for Space Applications
- D. Miniature and Chip Scale Atomic Clocks and other instrumentation
- E. Fundamental Physics, Fundamental Constants, & Other Applications

Group 4: Sensors & Transducers

- A. Resonant Chemical Sensors
- B. Resonant Physical Sensors
- C. Vibratory and Atomic Gyroscopes & Magnetometers
- D. BAW, SAW, FBAR, and MEMS Sensors
- E. Transducers
- F. Sensor Instrumentation

For updates on abstract submission and conference information as it becomes available, please visit the IEEE website at: <http://www.ieee.org/uffc/fc>

“This year the symposium will highlight microelectromechanical systems (MEMS) technology for frequency control. Abstracts centered around MEMS or miniaturization are highly encouraged, including work that applies such technology towards acoustic or atomic frequency references, filters, mixers, and sensors.”

Student Paper Competition

Students submitting abstracts for presentation are invited to participate in a student paper competition. To participate, the student must be the lead author and present the paper. A poster presentation is required for selected authors, which will be in addition to any oral presentation. Winners will receive an award and a certificate. Further information is on the conference web site. Student authors selected for the Student Paper Competition will be given preference for travel support. **Abstract submissions for the student paper competition should be noted during the abstract submission.**

Location

The 2010 IEEE International Frequency Control Symposium will be held at the Marriott Newport Beach Hotel in Newport Beach California, located just a short distance from the Pacific Ocean, next to the famous Fashion Island Shopping Area. All Southern California attractions are not far away including Disneyland and Sea World.



Award Nominations

Nominations and suggestions of candidates for the IEEE/UFFC Cady, Rabi and Sawyer Awards should be sent to the IEEE/UFFC Awards Chairman, Andreas Bauch. His contact information is andreas.bauch@ptb.de.

Abstract Submissions

Abstracts will be collected through a web-based submission tool. The submission deadline and procedure will be posted on <http://www.ieee.org/uffc/fc>.

Tutorial Information

On Tuesday, 1 June 2010, there will be a series of tutorials covering a wide range of related topics. The tutorials include both the fundamental topics of frequency and timing at a level suitable for practitioners new to the field, and more advanced and specialized topics related to specific areas. As such, the tutorials aim to provide useful knowledge to the beginners in the community, as well as those with extensive experience. Additional information and topics will follow. Previously presented tutorial topics may be found at <http://www.ieee-uffc.org/fc>.

Travel Support

Limited funds will be available to support students. Further information will be posted on the conference web site.