



2011 IEEE SUBTHRESHOLD MICROELECTRONICS CONFERENCE

September 26-27, 2011
MIT Lincoln Laboratory, Lexington, MA



Conference Chair

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Ultra-low-power microelectronics will expand the technological capability of handheld and wireless devices by dramatically improving battery life and portability. Ubiquitous sensor networks, RFID tags, implanted medical devices, portable biosensors, handheld devices, and space-based applications are among those that would benefit from extremely low power circuits. One of the most promising methods of achieving ultra-low-power microelectronics is to reduce the operating voltage to below the transistor threshold voltage, which can result in energy savings of more than 90% compared to conventional low-power microelectronics.

The 2011 IEEE Subthreshold Microelectronics Conference is soliciting papers for Oral and Poster presentations on fabrication and design of microelectronics operating at voltages below 0.5 V, as well as system needs and opportunities for integration of ultra-low-power microelectronics. Participants from Universities, Industry, and Government are all welcome, and student Oral presentations or Posters are also encouraged. Papers are solicited in the following technical focus areas, but research or concepts in any subject of ultra-low-power microelectronics will be considered:

- Unattended Remote Sensors
- Space-Based Sensors
- Implantable Biomedical Devices
- Handheld Biomedical Devices
- Ultra-Low-Power Computation
- Analog and RF Technologies
- Energy Management Circuits
- Memory Technologies
- Radiation Effects
- Transistor Variability and Mitigation
- Energy Harvesting Techniques
- Asynchronous Circuits
- Device and Fabrication Technology

The aim of the Conference is to provide an interactive environment for establishing collaborations, exchanging ideas, and facilitating discussion with potential users and sponsors of Subthreshold Microelectronics. To promote reporting of the most current activities, presentations may include preliminary work, concepts, or radical ideas. All presentations at the Conference will be considered Private Communications between researchers, and do not preclude the work from being published or presented elsewhere.

For more information, please visit <http://www.ll.mit.edu/subVt2011>

Abstract Submission Guidelines

Prospective authors are invited to send their abstracts to SubVt-conference@ll.mit.edu. Abstracts should be one page, including figures, and no more than 300 words, in MS Word or Adobe PDF format. Abstracts and presentations submitted for the Subthreshold Microelectronics Conference that are government sponsored must have prior approval of the sponsoring agency.

Abstract Submission Deadline: 15 July 2011

Author Notification: 22 July 2011



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