

IEEE International Conference on Rebooting Computing 2017

Third Announcement and Call for Papers

November 8-9, 2017, Washington DC

The Ritz-Carlton Hotel - McLean, Virginia, USA (just outside Washington DC)

PDF Version: [Call for Papers](#)

Overview: The goal of the 2nd IEEE International Conference on Rebooting Computing is to discover and foster novel methodologies to reinvent computing technology, including new materials and physics, devices and circuits, system and network architectures, and algorithms and software. The conference seeks input from a broad technical community, with emphasis on all aspects of the computing stack.

Program Highlights: Keynote and Invited Speakers, Paper Presentations, Poster Session, and Evening Panel

Topics of Interest: We invite submissions related to *fundamentally new ways to compute*.

Topics include, but are not limited to:

- Neuromorphic architectures
- Brain-inspired computing
- Approximate and stochastic computing
- Non-von-Neumann computer architectures, including in-memory processing and memory-based computing
- Quantum computing
- Optical computing
- Biological computing
- Extending Moore's law and augmenting CMOS
- Novel device physics and materials including spin-based electronics
- Energy-efficient computing including reversible, adiabatic, and ballistic computing
- Superconducting and cryogenic computing
- Error-tolerant logic and circuits
- Exploiting nonlinear dynamics and chaos in device behavior
- Cellular automata and cellular neural networks
- Beyond von Neumann software issues, including operating systems, compilers, security, and resource management
- Future of design automation

Submission Information

Authors may submit either Full Papers or Short Papers following the Authors' guidelines at <http://icrc.ieee.org/authors-guidelines/>

| <u>Important Dates</u> | <u>Co-located Events</u> |
|--|--|
| extended to June 2, 2017: Paper Abstracts due extended to June 16, 2017: Short and Full Paper Submissions due August 8, 2017: Acceptance Notification of Papers August 30, 2017: Final Paper Submissions and Poster Abstracts due September 2, 2017: Acceptance Notification of Posters September 29, 2017: Early Registration Deadline November 8-9, 2017: Dates of Conference | International Roadmap for Devices and Systems (IRDS) progress summaries on Tuesday, November 7 Industry Summit following ICRC on Friday, November 10 |

For more information: email rcinfo@ieee.org