

25th IEEE International Symposium on Field-Programmable Custom Computing Machines

April 30 – May 2, Napa CA, USA

<http://fccm.org>

THE IEEE INTERNATIONAL SYMPOSIUM ON FIELD-PROGRAMMABLE CUSTOM COMPUTING MACHINES (FCCM) is the original and premier forum for presenting and discussing new research related to computing that exploits the unique features and capabilities of FPGAs and other reconfigurable hardware.

Important Dates

Full Papers: **January 5, 2017**
Short Papers: **January 12, 2017**
Notification: **March 1, 2017**
Camera-Ready: **March 29, 2017**
Registration: **March 29, 2017**

Organizing Chairs

General: Jason Bakos, USC
Program: Ron Sass, UNC-Charlotte
Finance: Ken Eguro, Microsoft Research
Publication: Greg Stitt, Univ. of Florida
Sponsorships: Jan Gray, Gray Research
Publicity: Kyle Rupnow, ADSC
Demo Night: Nachiket Kapre, Univ. of Waterloo

Program Committee
(awaiting confirmations)

Venue

For the 25th annual meeting, FCCM will be held at the Napa Valley Marriott Hotel & Spa in Napa, CA — where the very first and most of the following sixteen FCCMs were held. Conveniently, it is also located near Silicon Valley.

The region is known for its many wineries; hundreds are within a short drive of the venue. The Napa Valley is also known for its world-class restaurants. Other regional attractions include the Golden Gate National Recreational area, Muir Woods National Monument (with its giant, ancient Redwood trees), and Point Reyes National Seashore. In the U.S., San Francisco is one of the top five most-visited cities by foreign tourists.

Attendees can reach Napa via four international airports: San Francisco (SFO), Oakland (OAK), Sacramento (SMF), and San Jose (SJC). Renting a car is generally the most convenient way of navigating the area.

In addition to the technical program of papers being solicited here, FCCM 2017 will include a keynote speaker, (the now immemorial) Demo Night, and a Sunday afternoon program.

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For 25 years, FCCM has been the place to present papers on architectures, tools, reconfiguration techniques, and applications for field-programmable custom computing machines. Original manuscripts (not currently under review elsewhere) are solicited on the following topics:

Architectures

- Novel reconfigurable architectures, including overlay architectures
- Architectures for high performance and/or low-power computing
- Security enhancements for reconfigurable computing
- Volatile and non-volatile memory subsystems; stacked/hybrid memory cubes
- Clusters or large systems of reconfigurable devices

Tools

- Abstractions, programming models, and runtimes, including virtualization
- New languages and design frameworks for spatial or heterogeneous applications
- High-level synthesis and designer productivity in general
- Software-Defined-systems (SDN, SDR, frameworks for new domains)

Reconfiguration

- Run-time management of reconfigurable hardware
- System resilience/fault tolerance for reconfigurable hardware
- Evolvable, adaptable, or autonomous reconfigurable computing systems
- Security implications of run-time reconfiguration

Applications

- Applications built using new high level synthesis technologies
- Data center/cluster with reconfigurable applications
- New uses of run-time reconfiguration in application-specific systems
- Applications that utilize reconfigurable technology for performance and efficiency
- Novel use of state-of-the-art commercial FPGAs

Special Note to Authors

Application papers should contain insights and lessons that can be carried forward into future designs. Across all topics — and especially for application papers — successful manuscripts will include sufficient details to reproduce the results presented. Papers that emphasize reproducibility and significantly corroborate/contradict the existing literature are valued. CAD papers that focus on the configurable nature of custom computing machines are encouraged.

Review Process

FCCM reviews submissions in two, separate streams: 8-page papers for oral presentation and 4-page papers for brief oral and poster presentation. Both appear in the published proceedings. All submissions are reviewed in English. Papers must meet the IEEE guidelines to be reviewed and published; links to templates are at the FCCM website.

Papers that present preliminary/early work are strongly encouraged to submit to the 4-page review stream. These submissions are due one week later than the 8-page submissions. Do not submit the same work to both streams.

FCCM uses a double blind reviewing system. Manuscripts must not identify authors or their affiliations. Authors are encouraged to cite their own work but must not implicitly identify themselves. For example, references that clearly identify the authors (“We build on *our* previous work...”) should be written as “This work builds on XYZ [cite]” where [cite] is the **real** reference. **Do not put a “deleted for double-blind” entry in the reference section.** (Without proper references to the prior work, reviewers will not be able to determine the contribution of the submission.) In the case of widely-available Open Source software, authors should embrace the website(s) but not claim to own them. Authors should also remember to mask grant numbers and other government markings during the review process. In short, *papers that attempt to identify authors or leverage prior work or institutional support for a competitive advantage in the peer review process will not be considered.*

An online submission link will be available on the FCCM website in late December.

Best Paper Award and ACM TRETTS Special Section

FCCM 2017 will continue the tradition of having a best paper award. We will also invite the authors of the top papers to extend their work to be considered for publication in a special section of ACM’s Transactions on Reconfigurable Technology and Systems (TRETTS) for FCCM 2017. Send in your best work for consideration!