

DO YOU STILL HANDCRAFT YOUR ANALOG AND RF LAYOUTS?

SMACD19 SPECIAL SESSION

15-18 JULY • LAUSANNE • SWITZERLAND

CALL FOR SPECIAL SESSION ON "DO YOU STILL HANDCRAFT YOUR ANALOG AND RF LAYOUTS?"

Today's integrated circuits industry is characterized by complex systems-on-a-chip architectures where digital signal processing, analog interfaces, and memory blocks are integrated together on the same die. However, unlike digital circuits where the low-level phases of the design process are automated using established methodologies, the layout of analog and radio-frequency circuits is mostly drawn manually using computer-aided design frameworks. Although its automation has been intensively studied in the last three decades, still, there is no established automation flow in the industrial environment, resulting in a time-consuming and difficult-to-reuse design methodology.

Moreover, as analog and radio-frequency integrated circuit design moves to deeper nanometer technology nodes, the ever-increasing number of design rules and topological constraints further hamper the maturing of these tools. The aim of this Special Session is to bring together new research contributions dealing with analog and radio-frequency layout synthesis, spanning from the device methodologies up to the system level. Topics include, but are not limited to:

- Representations and optimization techniques for user-assisted and automatic placement;
- Representations and path-finding algorithms for user-assisted and automatic routing;
- Layout-aware sizing methodologies;
 - Deep nanometer issues: layout-dependent effects, parasitic coupling, parasitic modeling, double patterning, etc.;
 - Layout description languages, devices and procedural generators;
 - Layout retargeting from legacy designs.

ORGANIZERS

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PAPER SUBMISSION

If you would like to contribute to this Special Session please contact its organizers.

All paper submissions should follow the SMACD guidelines: smacd2019.com/paper-submission

Important Note: Authors should only indicate the "Special Session" option when submitting the paper on the **EasyChair platform**.

IMPORTANT DATES

Paper Submission Deadline	8 th March 2019
Author Notification	19 ^h April 2019
Camera Ready Submission	3 th May 2019
Early Registration Deadline	3 th May 2019

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