

Call for Contributions

Inform the Chair: with the Title of your Contribution

Submission URL:

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICN+2017+Special>

Please select Track Preference as **AAFAA**

Special track

AAFAA: Advances in Adaptive Filtering for Acoustic Applications

Chair and Coordinator:

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along with

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<http://www.iaria.org/conferences2017/ICN17.html>

Adaptive filtering is everywhere: in the mobile phone when performing radio channel estimation, in a medical device when processing an ultrasound image, in the modern wireless communications systems when implementing beamforming, etc.

But one of the most studied areas for adaptive filtering is the one related to acoustic applications. Both the simplicity of the configuration and the immediate methods to evaluate the performance contributed to the popularity of this binomial pair: adaptive filtering and acoustic applications. And, when we thought that everything has been said, knowing to efficiently implement on Field Programmable Gate Array (FPGA) algorithms such as QR-decomposition Recursive Least Square (QRD-RLS) using systolic areas, a new step in acoustic application has been made. Today, the distances are not important anymore since video and audio connections are used by doctors to investigate patients, by teachers to present the courses, by business men to close deals, etc. The only constraint is the quality of these connections. This is the reason why the new acoustic Multiple Input Multiple Output (MIMO) setups appeared. With such a configuration, new approaches as dichotomous coordinate descent (DCD) RLS were introduced.

In this context, we have to compute the inverse of very large matrices, we have to reduce (as much as possible) the echo, even during double-talk periods, and we have to do it with reduced costs.

The objective of this special track is to identify novel forms of adaptive algorithms, adapted to this new acoustic applications reality from performance point of view, but also efficient from implementation complexity perspective. In other words, the highly theoretical studies should be combined with strong applicative approaches, in order to converge through complete solutions.

Important Datelines

- Inform the Chair: As soon as you decided to contribute
- Submission: ~~January 15~~ **March 15**
- Notification with comments for camera-ready: ~~February 20~~ **March 22**
- Registration: ~~March 5~~ **April 1**
- Camera ready: ~~March 15~~ **April 1**

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.aria.org]
- Presentations: slide only [slide-deck posted on www.aria.org]
- Demos: two pages [posted on www.aria.org]

Paper Format

- See: <http://www.aria.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.aria.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.ariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.aria.org/registration.html>

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