Tentative Outline

Aims & Scope:

Complex-values statistical signal processing and system modeling algorithms have been viewed as a straightforward extension of the corresponding real-valued domain algorithms. Nevertheless, recent proposals in augmented complex statistics show that they do not make full use of the algebraic structure of the complex domain. For instance, it has been shown that the standard linear model is only sufficient for modeling proper signals, whereas an optimal model for improper signals is provided by a widely linear model. Such challenges raise the need of complex-valued adaptive filtering and signal processing.

In this special issue, we aim to receive novel and descent proposals on real/complex domain adaptive filtering algorithms, their theoretical analysis and implementations, and applications. Potential topics include, but are not limited to:

- Real-valued adaptive filters.
- Complex-valued adaptive filters.
- Analysis of complex/real-valued adaptive systems.
- Descent applications on complex-valued adaptive systems.

Keywords: adaptive filtering algorithms, sparsity-aware adaptive algorithms, adaptive system identification, adaptive noise cancelation, adaptive inverse modeling.

Subtopics:

The subtopics to be covered within this issue are listed below:

- Real-valued adaptive filters.
- Complex-valued adaptive filters.
- Analysis of complex/real-valued adaptive systems.
- Descent applications on complex-valued adaptive systems.

Schedule:

- ✦ Manuscript submission deadline: April, 30th, 2020
- ✦ Peer Review Due: May, 29th, 2020
- ✦ Revision Due: June, 26th, 2020
- ✦ Announcement of acceptance by the Guest Editors: July, 3rd, 2020
- ✦ Final manuscripts due: July, 10th, 2020.

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