CALL FOR PAPERS

Symposium on Graph Signal Processing
Call for Papers

General Chair:
Gonzalo Mateos, University of Rochester

Technical Co-Chairs:
Santiago Segarra, Rice University
Sundeep Prabhakar Chepuri, Indian Institute of Science

Understanding networks and networked behavior has emerged as one of the foremost intellectual challenges of the 21st century. Networks define an underlying notion of proximity and the main object of interest is a signal defined on top of the graph, i.e., data associated with the nodes or edges of the network. This is precisely the focus of graph signal processing, studying the interplay between the underlying network topology and features of signals defined on networks. This symposium aims to bring together researchers and practitioners of graph signal processing to discuss the latest advances in theory, methods, and applications, as well as open problems and challenges. Topics of interest include, but are not limited to:

- Graph signal representations
- Graph-based transforms
- Graph filters
- Network topology inference
- Prediction and learning on/over graphs
- Modeling and control of network processes
- Statistical graph signal processing
- Sampling and recovery of graph signals
- Signals in higher-order and multiplex graphs

- Neural networks for graph data
- Topological data analysis
- Non-linear graph signal processing
- Uncertainty principles and other fundamental limits
- Graph-based image and video analysis
- Applications in sensor networks
- Applications in wireless communications
- Applications in neuroscience and other biomedical fields
- Applications to social and economic networks

Paper Submission: Prospective authors are invited to submit full-length papers (up to 4 pages for technical content including figures and possible references, and with one additional optional 5th page containing only references) and extended abstracts (up to 2 pages, for paper-less industry presentations and Ongoing Work presentations) via the GlobalSIP 2019 conference website. Manuscripts should be original (not submitted/published anywhere else) and written in accordance with the standard IEEE double-column paper template. The accepted abstracts will not be indexed in IEEE Xplore, however the abstracts and/or the presentations will be included in the IEEE SPS SigPort. Accepted papers and abstracts will be scheduled in lecture and poster sessions.

Important Dates:
- ➢ **June 27, 2019**: Paper submission due (regular and invited)
- ➢ **July 15, 2019**: Notification of Acceptance
- ➢ **Aug. 15, 2019**: Camera-ready regular and invited papers due

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