

SPARS 2019

Toulouse, France, July 1-4, 2019



The **Signal Processing with Adaptive Sparse Structured Representations** (SPARS) workshop will bring together people from statistics, engineering, mathematics, and computer science, working on the general area of sparsity-related techniques and computational methods, for high dimensional data analysis, signal processing, and related applications.

Call for papers

Contributions are solicited as one-page abstracts, which may extend to a second page in order to include figures, tables and references. They should present recent research results (possibly already published). Abstract submissions for technological demonstrations of the mathematical topics within the scope are also welcome. Students may enter the Best Student Paper contest (six-pages submission, with substantial novelty).

Topics of interest include (but are not limited to):

- Compressive sensing & learning
- Representation learning (sparse coding, dictionary & deep learning)
- Low-rank approximation, matrix & tensor decomposition
- Phase retrieval, inverse problems with sparsity
- Sparsity in approximation theory, information theory, and statistics
- Bayesian sparse modeling & inference
- Optimization theory & algorithms for sparsity
- Sparse graph & network analysis
- Low-complexity/low-dimensional models
- Applications

<http://spars-workshop.org>

Plenary speakers

- **Yuejie Chi**, Carnegie Mellon University
- **Émilie Chouzenoux**, University Paris-Est
- **Mark Davenport**, Georgia Institute of Technology
- **Monika Dörfler**, University of Vienna
- **Pier Luigi Dragotti**, Imperial College London
- **Bhaskar Rao**, UC San Diego
- **Simon Thorpe**, CNRS
- **Lenka Zdeborova**, CNRS

Special talk

- **Michael Jordan**, UC Berkeley

Schedule

Submission deadline: **April 1, 2019 (extended)**

Notification of acceptance: **May 15, 2019**

Early-bird registration deadline: **June 1, 2019**

Workshop: **July 1-4, 2019**

Venue

SPARS 2019 will be held on the campus of the engineering school ENSEEIHT, in the city center of Toulouse.

Chairs

- **Nicolas Dobigeon**, Toulouse INP
- **Cédric Févotte**, CNRS



institut
universitaire
de France