

LVA ICA 2018

14th International Conference on Latent Variable Analysis and Signal Separation

July 2-6, 2018 University of Surrey, Guildford, UK

Call for Papers

The **International Conference on Latent Variable Analysis and Signal Separation, LVA/ICA 2018**, is an interdisciplinary forum where researchers and practitioners can experience a broad range of exciting theories and applications involving signal processing, applied statistics, machine learning, linear and multilinear algebra, numerical analysis and optimization, and other areas targeting Latent Variable Analysis problems.

Prospective authors are invited to submit original papers in all areas related to latent variable analysis and signal separation, including but not limited to:

- **Theory:** statistical and probabilistic models; detection, estimation and performance criteria and bounds; causality measures; flat, hierarchical and dynamic structures; sparsity-promoting methods; learning theory; sparse coding; optimization tools; sketching and censoring for large scale data;
- **Models:** latent variables modeling as parameters, vectors or signals, discrete or continuous; probabilistic or structural modeling; time-varying, memoryless, convolutive, noisy, noiseless, under- and over-complete; low-rank models, graph models, online models;
- **Algorithms:** estimation, separation, identification, detection, blind and semi-blind methods, non-negative matrix factorization, tensor decomposition, adaptive and recursive estimation; features selection; time-frequency and wavelets based analysis; complexity analysis;
- **Applications:** speech and audio separation, recognition, dereverberation and denoising; auditory scene analysis; image segmentation, separation, fusion, classification, texture analysis; non-conventional signals (e.g. graph signals, quantum sources); biomedical signal analysis, imaging, genomic data analysis, brain-computer interface;
- **Emerging related topics:** social networks; data-mining; artificial intelligence; sparse coding; objective and subjective performance evaluation.

Papers must be original and must not be already published nor under review elsewhere.

Keynote Speakers

Orly Alter

Scientific Computing & Imaging Institute
and Huntsman Cancer Institute, University of Utah, USA

Andrzej Cichocki

Brain Science Institute, RIKEN, Japan

Tuomas Virtanen

Laboratory of Signal Processing
Tampere University of Technology, Finland

Venue

LVA/ICA 2018 will be held at the University of Surrey, Guildford, in the South East of England, UK. The university is a ten minute walk away from the town centre, which offers a vibrant blend of entertainment, culture and history.

Guildford is 40 minutes from London by train, and convenient for both London Heathrow and London Gatwick airports.

Important Dates

Paper submission deadline (extended)..... **February 4, 2018**

Full paper upload deadline..... **February 7, 2018**

Notification of acceptance March 19, 2018

Camera ready submission April 6, 2018

Summer School **July 2, 2018**

Conference **July 3-6, 2018**

Conference Chairs

General Chairs

Mark Plumbley CVSSP, University of Surrey, UK

Russell Mason IoSR, University of Surrey, UK

Program Chairs

Sharon Gannot Bar-Ilan University, Israel

Yannick Deville Université Paul Sabatier Toulouse 3, France

Website

cvssp.org/events/lva-ica-2018