



Special issue on Latent Variable Analysis and Signal Separation

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While independent component analysis and blind signal separation have become mainstream topics in signal and image processing, new approaches have emerged to solve problems involving nonlinear signal mixtures or various other types of latent variables, such as semi-blind models and matrix or tensor decompositions. All these recent topics lead to new developments and promising applications. They are the main goals of the conference LVA/ICA 2010 which took place in Saint-Malo, France, from September 27 to 30, 2010.

The aim of this special issue is to provide up to date developments on Latent Variable Analysis and Signal Separation, including theoretical analysis, algorithms and applications. Contributions are welcome both from attendees of the above conference and from authors who did not attend the conference but are active in these areas of research.

Examples of topics relevant to the special issue include:

- Non-negative matrix factorization
- Joint tensor factorization
- Latent variables
- Source separation
- Nonlinear ICA
- Noisy ICA
- BSS/ICA applications (image analysis, speech and audio data, encoding of natural scenes and sound, telecommunications, data mining, medical data processing, genomic data analysis, finance, etc.)
- Unsolved and emerging problems: causality detection; feature selection, data mining,...

Submission instructions:

Manuscript submissions shall be made through the Elsevier Editorial System (EES) at

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Once logged in, click on "Submit New Manuscript" then select "Special Issue: LVA" in the "Choose Article Type" dropdown menu.

Important dates:

January 15, 2011: Manuscript submission deadline

May 15, 2011: Notification to authors

September 15, 2011: Final manuscript submission

December 15, 2011: Publication

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