

DATA ANALYSIS IN X-RAY TOMOGRAPHIC RECONSTRUCTION

Special Session of the 9th International Symposium on Image and Signal Processing and Analysis (ISPA 2015)

September 7-9, 2015, Zagreb, Croatia

<http://www.isispa.org/>

In recent years, significant advances have been made in the field of X-ray imaging. Modern X-ray scanners can collect a huge amount of data which is processed by custom-tailored reconstruction algorithms. Reconstructed images are then analysed with advanced image processing techniques. As a result, faster image formation, increased spatial and temporal resolution, and more detailed image analysis can be achieved. The aim of the special session is to investigate the tomographic process from the viewpoint of the data processed. The topic of the special session includes, but is not limited to

- linear and non-linear modeling methods of X-ray imaging devices;
- novel type and/or custom-tailored image reconstruction algorithms;
- handling with noisy, imprecise or missing data in tomography;
- collecting and exploiting prior information in image reconstruction;
- data collection, analysis and visualization in reconstruction tomography;
- machine learning methods in tomography;
- optimization in tomography;
- applications in absorption-, phase-, fluorescent-, and diffraction-contrast tomography.

Submission Process: Interested authors are invited to submit papers to this special session through ISPA online submission system by marking the check box on the submission page corresponding to the desired special session. Authors should follow the author instructions for regular ISPA papers. The deadline for online paper submission for this special session is the same as the deadline for regular papers.

Review Process: Papers submitted to this special session will be subject to peer-review. Accepted special session papers will be published in the Symposium Proceedings in the same length and format as regular ISPA papers.

For further information and important dates see the conference webpage.

Organisers of the special session:

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