
Porquerolles 2009 – Program

Monday, June 8th

- 11:00-12:15 Registration
12:15-14:00 **Lunch**
Chairman: Russel Luke
14:00-14:30 Claude Comtat, [The role of image reconstruction algorithms in positron emission tomography](#)
14:30-15:00 Yves Guossard, [Non-Linear X-ray CT Reconstruction From Real Data](#)
15:00-15:15 Coffee break
15:15-15:45 Andrew Reader, [Spectral Analysis Approaches To 4D Image Reconstruction Algorithms For Dynamic Positron Emission Tomography](#)
15:45-16:15 Dimitri Van de Ville, [Wavelets Tailored to Functional Imaging: Applications to fMRI and Dynamic PET](#)
16:15-16:45 Philippe Ciuciu, [Unsupervised wavelet-based regularization in parallel MRI reconstruction](#)
19:00 **Welcome reception**

Tuesday, June 9th

- Chairman: Marc Teboulle*
9:30-10:00 Albert Cohen, [Theory and algorithms for anisotropic triangulations with applications to image representations](#)
10:00-10:30 Ron DeVore, [Decoding in Compressed Sensing](#)
10:30-10:45 **Coffee break**
10:45-11:15 Jalal Fadili, [Dequantizing Compressed Sensing: Sparse recovery with non-Gaussian constraints](#)
11:15-11:45 Massimo Fornasier, [Iteratively re-weighted least square methods for sparse optimization](#)
11:45-12:15 Gabriel Peyré, [Compressive Wave Computation](#)
12:15-14:00 **Lunch**
Chairman: Alvaro R. De Pierro
14:00-14:30 Ali Mohammad-Djafari, [Gauss-Markov-Potts Priors for Images in Computer Tomography Resulting to Joint Reconstruction and segmentation](#)
14:30-15:00 Stanley Osher, [New Algorithms in Information Science](#)
15:00-15:15 **Coffee break**
15:15-15:45 Marc Sigelle, [SAR Image Regularization with Graph-Cuts Based Fast Approximate Discrete Minimization](#)
15:45-16:15 Michael Unser, [Fast multi-level reconstruction of biomedical images using wavelet sparsity constraints](#)
16:15-16:30 **Break**
16:30-17:15 Panel discussion

Wednesday, June 10th

- Chairman: Jérôme Bolte*
9:30-10:00 Christine de Mol, [A fast gradient projection algorithm for \$l_1\$ -constrained signal recovery](#)
10:00-10:30 Jérôme Idier, [Algorithms for image restoration and reconstruction making use of the MM](#)

[principle](#)

10:30-10:45 **Coffee break**

10:45-11:15 Dirk Lorenz, [First order methods for non-smooth convex optimization: Proximal forward-backward splitting and generalized gradient methods](#)

11:15-11:45 Marc Teboulle, [Fast Gradient-Based Schemes for Total Variation Minimization](#)

11:45-12:15 Isao Yamada, [Signal Processing Applications of a pair of simple Fixed Point Algorithms](#)

12:15-14:00 **Lunch**

Chairman: Jérôme Idier

14:00-14:30 Jacques Froment, [Self-similarity of images in the context of the non-local means filter](#)

14:30-15:00 Valérie Perrier, [The Empirical Mode Decomposition: a new formulation based on Constrained Optimization](#)

15:00-15:15 **Coffee break**

15:15-15:45 Aleksandra Pizurica, [On spatial priors in multiresolution image denoising: from local spatial activity indicators to MRF and MPGSM models](#)

15:45-16:15 Gabriele Steidl, [Removing Multiplicative Noise By Douglas-Rachford Splitting Methods](#)

19:45 **Banquet**

Thursday, June 11th

Chairman: Albert Cohen

9:30-10:00 Russell Luke, [Iterated Proximal Operators: Novel Perspectives and Applications](#)

10:00-10:30 Francois Malgouyres, [Average Performance of the sparsest approximation using a dictionary](#)

10:30-10:45 **Coffee break**

10:45-11:15 Stanley Osher (joint with J. Miao), [Iterative algorithm for tomographic image reconstruction](#)

11:15-11:45 Mario Figueiredo, [Recent Advances in Iterative Shrinkage/Thresholding](#)

11:45-12:15 Joel Trussell, [Building Look-up Tables of Sparsely Sampled Color Signals](#)

12:15-14:00 **Lunch**

Chairman: Michel Defrise

14:00-14:30 [Caroline Chau, Hybrid regularization for data restoration](#)

14:30-15:00 Alvaro R. De Pierro, [From Projection Methods for Feasibility to their Extension for General Convex Nondifferentiable Constrained Optimization: Applications in Emission Computed Tomography](#)

15:00-15:15 **Coffee break**

15:15-15:45 Gabor Herman, [Finitely Convergent Sequential Algorithms and Their Applications to Intensity-Modulated Radiation Therapy](#)

15:45-16:15 Pierre Maréchal, [Issues in Thermoacoustic Tomography](#)

16:15-16:30 **Break**

16:30-17:15 Panel discussion

Friday, June 12th

Chairman: Joel Trussel

[9:00-9:30](#) Antonin Chambolle, [Computing minimal partitions](#)

9:30-10:00 [Patrick Louis Combettes, Fenchel-Rockafellar dualization of signal recovery problems](#)

10:00-10:30 [Elena Resmerita, On regularization methods of EM-Kaczmarz type](#)

10:30-10:45 **Coffee break**

12:15-14:00 **Lunch**
