

**Advances in Mathematical Image Processing
Göttingen, 04.-06. September 2012**

PROGRAM

Tuesday, September 4, 2012

09.20	<i>Opening</i>	
	<i>Chair: Krahmer</i>	
09.30	Maaß	Optimal basis functions for sparsity constraint image processing and applications in MALDI Imaging
10.30	Tasche	Parameter estimation for exponential sums and sparse Fourier approximation
11.00	<i>Coffee break</i>	
	<i>Chair: Plonka-Hoch</i>	
11.30	Lim	Faithful discretization concept of directional transform and its applications in image processing
12.00	Krahmer	Compressive imaging: Sampling strategies and reconstruction guarantees
12.30	Storath	Signal and image analysis by wavelet signs
13.00	<i>Lunch break</i>	
	<i>Chair: Steidl</i>	
14.30	Weickert	Advances in PDE-based image compression
15.15	Huang	An optimization based empirical mode decomposition scheme for images
15.45	<i>Coffee break</i>	
	<i>Chair: Maaß</i>	
16.15	Wischerhoff	Real function reconstruction from sparse Fourier samples
16.45	Volkmer	Nonequidistant fast Fourier transform for frequencies supported on a subset of the full grid
17.15	Peter	Approximation by M -sparse sums of eigenfunctions of linear operators
17.45	General assembly of the GAMM activity group Mathematical signal and image processing	
18.30	<i>Dinner</i>	
19.30	Poster session	

Wednesday, September 5, 2012

	<i>Chair: Weickert</i>	
09.30	Steidl	Penalizers and constraints in convex image processing
10.30	Shafei	Supervised and transductive multi-class segmentation using p-Laplacians and RKHS methods
11.00	<i>Coffee break</i>	
	<i>Chair: Welk</i>	
11.30	Swoboda	Histogram constraint image regularization
12.00	Dong	A convex variational model for restoring blurred images with multiplicative noise
12.30	King	Analysis of inpainting via clustered csparsity and micrological analysis
13.00	<i>Lunch break</i>	
	<i>Chair: de Mol</i>	
14.30	Teboulle	First order algorithms for the sparsity constrained rank-one approximation problem
15.15	Cherugondi	Splitting algorithms for imaging with generalized noise models
15.45	<i>Coffee break</i>	
	<i>Chair: Potts</i>	
16.15	Iske	Optimal N -term approximation by linear splines over anisotropic Delaunay triangulations
16.45	Phillip	Scalable frames
17.15	Platen	Solving the Monge-Ampere-equation for the inverse reflector problem
17.45	Lasaruk	Reconstruction of sculptures with approximation
18.30	<i>Dinner</i>	

Thursday, September 6, 2012

	<i>Chair: Luke</i>	
09.30	Pock	A bilevel optimization approach for parameter learning in variational models
10.30	de Mol	On blind deconvolution and nonnegative matrix factorization
11.00	<i>Coffee break</i>	
	<i>Chair: Iske</i>	
11.30	Ehler	Signal reconstruction from the magnitude of subspace components
12.00	Welk	Relations between morphological and PDE image filters
12.30	Guillemard	New trends in computational topology and signal processing
13.00	<i>Lunch</i>	
14.00		<i>Walk through the woods or excursion in Göttingen (2 hours)</i>

Poster session on Tuesday, September 4, 2012, 19.30-21.00

Boßmann	Polygon reconstruction from it's distances to scattered points
Breuß	Discrete flux-corrected transport for mathematical morphology
Demaret et al.	The L_1 -Potts functional. Fast algorithm and application to deconvolution
Heinen	Wavelet shrinkage on paths for scattered data denoising
Krause-Solberg	Dimensionality reduction methods for signal detection
Luke	Sparsity optimization with affine constraints: local linear convergence
Thay	Fingerprint image segmentation via total variation
Wischerhoff	Real function reconstruction from sparse Fourier samples