PROGRAM AT A GLANCE

	Monday 10	Tuesday 11	Wednesday 12	Thursday 13	Friday 14
09h00	**Registration**	***E. Simoncelli*** Locally adaptive image representation	***J. Kovacevic*** Next-generation bioimaging systems		***J. Benedetto*** Waveform design and sigma-delta quantization
09h30	**Welcome**				
10h00	***G. Baraniuk*** Compressive imaging and the multiscale manifold structure of image ensembles	**Coffee**	**Coffee**	**Coffee**	**Coffee**
10h30		***M. Elad*** Sparse and redundant signal representation, and its role in image processing	***A. Cohen*** Adaptive approximations by greedy algorithms	***P.-L. Dragotti*** Sampling and reconstructing signal innovations with local algorithms	***A. Aldroubi*** Optimal shift invariant space models and their Parseval frame generators
11h00	**Coffee**			***I. Khalidov*** ***C. Vonesch*** Wavelet bases revisited	
11h30	***G. Steidl*** Diffusion filters and wavelets	***V. Goyal*** Universal compression of sparse sources: bounds and improvements	***C. Ancey*** Wavelet-vaguelette decomposition and its application to rheometry	***L. Raphael*** Statistical learning theory and uniform approximation bounds in wavelet spaces	***R. DeVore*** Remarks on compressed sensing
12h00			***G. Petrova*** Greedy wavelet projections are bounded on BV	***V. Perrier*** Wavelets for local tomography	
	Lunch	**Lunch**	**Lunch**	**Lunch**	**Closing**
					Lunch
14h00	***N. Kingsbury*** Rotation-invariant matching of local features using complex wavelets	***S. Mallat*** Multiscale geometrical grouping of signals and images	**free**	***E. Candes*** Robust compressive sampling	
14h30	***N. Dyn*** Low bit-rate image coding using adaptative geometric piecewise polynomial approximation				
15h00	***O. Renaud*** Simultaneous tests in the time-frequency plane for electroencephalogram signals	**Poster 1** coffee dessert		**Poster 2** coffee dessert	
15h30	**Coffee**				
16h00	***G. Plonka*** An efficient nonlinear scheme for image denoising				
16h30	***J.-P. Antoine*** Partial inner product spaces in Gabor/wavelet analysis				
17h00			*Social event* Meeting on 18h45		

Poster Session 1, Tuesday, July 11

A-3 THE CONTINUOUS WAVELET TRANSFORM ON CONIC SECTIONS

A-5 A SPATIALLY-ADAPTIVE MAP ESTIMATION APPROACH TO MULTIRESOLUTION DESPECKLING OF SAR IMAGES

A-7 DISTRIBUTED ACQUISITION AND IMAGE SUPER-RESOLUTION BASED ON SAMPLING KERNELS REPRODUCING POLYNOMIALS

A-9 WAVELET ANALYSIS OF ANISOTROPIC QUASI-SELF-SIMILAR FUNCTIONS IN A NONLINEAR CASE

A-11 WAVELETS FOR LOCAL TOMOGRAPHY

A-13 ORTHOGONAL DESIGN-ORIENTED HAAR WAVELET TRANSFORM FOR IRREGULARLY SPACED DATA

A-15 SOME REMARKS ON POLYHARMONIC B-SPLINES

A-17 PROPOSAL OF A WAVELET THAT GENERATES A TIME-INDEPENDENT TRANSFER FUNCTION FROM A LINEAR DIFFERENTIAL EQUATION

A-19 NEW EFFICIENT IMPLEMENTATION OF THE DISCRETE WAVELET TRANSFORM WITH ARBITRARY FIR ANALYSIS FILTERS

A-25 MULTISCALE KEYPOINT DETECTION USING DUAL-TREE COMPLEX WAVELETS

A-27 SINGLE IMAGE SUPERRESOLUTION INTERPOLATION BY WAVELET SUPPORT VECTOR REGRESSION

A-29 PARTIAL VOLUME CORRECTION OF SMALL ANIMAL PET IMAGES IN THE WAVELET DOMAIN

A-31 USE THE DISCRETE GEOMETRY TO DISCRETIZE THE RIDGELET TRANSFORM

A-33 HFSWR CLUTTER MITIGATION USING WAVELET PROCESSING

A-35 DENOISING OF CARDIAC SIGNALS WITH OPTIMAL WAVELETS

A-37 FRAMES OF SUBMODULES AND G-FRAMES IN HILBERT C*-MODULES

A-41 SOLVING SINGULARLY PERTURBED REACTION DIFFUSION PROBLEMS USING CUBIC SPLINE ADAPTIVE WAVELET SCHEME

A-43 IMAGE DENOISING BY LINE-FIELD BASED FILTER AND WAVELET SHRINKAGE

A-45 A WAVELET BASED FLAT PANEL DISPLAY DEFECT DETECTION

A-47 CURVELET-BASED SNAKE FOR MULTISCALE TRACKING OF GEOPHYSICAL FLUIDS

A-49 MEXICAN HAT WAVELET ON THE HEISENBERG GROUP AND ITS DISCRETIZATION

A-51 ONE-DIMENSIONAL PROCESSING TECHNIQUE FOR WAVELET TRANSFORM BASED DETECTION OF MICROCALCIFICATIONS IN MAMMOGRAMS

A-53 DNA SEQUENCES ANALYSIS USING WAVELET TRANSFORM

A-55 TWO DIMENSIONAL NON-SEPARABLE LOCALISATION

A-57 REDUNDANT WAVELET SCHEMES FOR MULTIPLE DESCRIPTION CODING

A-59 AN EFFICIENT NONLINEAR SCHEME FOR IMAGE DENOISING

A-61 ANALYSIS OF DNA STRUCTURE AS A 2D WALK BY COMPLEX WAVELET TRANSFORM

A-61b DIFFUSION SMOOTHING AS A METHOD FOR EVALUATION OF THE CONTINUOUS WAVELET TRANSFORM

A-63 2D ANISOTROPIC WAVELET FOR EDGE EXTRACTION IN 2D SIGNAL

A-67 APPLICATION OF THE 3D WAVELET TRANSFORM ON TRAFFIC CONTROL IMAGES

A-69 NEAR COIFLET TYPE SCALING FILTER OPTIMIZED FOR NON-LINEAR APPROXIMATION

A-71 SHAPES FROM SAMPLES USING MOMENTS AND RADON PROJECTIONS

A-73 TWO NOVEL ALGORITHMS FOR THE DETECTION OF SPOTS AND THE EXTRACTION OF FRONTIERS IN SPECKLED IMAGES BASED ON THE WAVELET TRANSFORM

A-75 NORMAL MESH TECHNIQUES FOR CONTOUR APPROXIMATION

A-77 TESTING MONO-VS. MULTIFRACTAL WITH BOOTSTRAPPED WAVELET LEADERS

A-79 STEERABLE WAVELETS ON THE SPHERE AND COSMOLOGICAL DATA ANALYSIS

Poster Session 2, Thursday, July 13

A-2 EXTRACTING IMAGE FEATURES FROM THE PHASES OF COMPLEX WAVELETS

A-6 WAVELET FILTERING OF THE P300 COMPONENT IN EVENT-RELATED POTENTIALS

A-8 A DOUBLY ITERATIVE WAVELET ALGORITHM FOR EDGE PRESERVING IMAGE RECONSTRUCTION

A-10 BLOW UP IN REACTION DIFFUSION EQUATIONS WITH TRAVELING WAVELETS

A-12 BESOV REGULARITY OF FUNCTIONS WITH RANDOM WAVELET COEFFICIENTS

A-14 CONNECTIVITY AND DENSITY IN THE SET OF FRAMELETS

A-16 NONLINEAR APPROXIMATION WITH GENERALIZED CURVELETS

A-18 HARMONIC WAVELETS AND CONNECTION COEFFICIENTS FOR THE MULTISCALE ANALYSIS OF CONTOUR SHAPE

A-20 ESTIMATION OF THE LIPSCHITZ REGULARITY EXPONENT WITH CURVELETS

A-22 GEOMETRY DRIVEN IMAGE COMPRESSION SCHEMES WITH WEDGELETS

A-24 A WAVELET APPROACH TO ARABIC CHARACTER RECOGNITION

A-26 REGULAR AND IRREGULAR GENERALIZED SAMPLING IN WAVELET SUBSPACES

A-28 VIDEO DENOISING USING MOTION-COMPENSATED LIFTING WAVELET TRANSFORM

A-30 WAVELET TRANSFORM BASED IMAGE INPAINTING ALGORITHM

A-32 DIMENSION FUNCTION OF A WAVELET ASSOCIATED WITH A RATIONAL DILATION MATRIX

A-34 EXACT AND APPROXIMATE MINIMAL SUPPORT SOLUTIONS OF UNDERDETERMINED LINEAR EQUATION SYSTEMS

A-36 A TOUR IN THE CONCRETE CONSTRUCTIONS OF UNIDIMENSIONAL AND MULTIDIMENSIONAL WAVELETS BASES

A-38 SUM OF TWO SHIFT-INVARIANT SPACES AND ITS APPLICATIONS TO THE UEP WAVELET FRAMES

A-40 STATISTICAL LEARNING THEORY AND UNIFORM APPROXIMATION BOUNDS IN WAVELET SPACES

A-42 SAMPLING EXPANSION FORMULA IN SHIFT-INVARIANT SPACES

A-44 GEOMETRICAL EDGE DETECTION AND ITS APPLICATIONS TO MEDICAL IMAGING, WATERMAKING, AND IMAGE COMPRESSION

A-46 NOISE REDUCTION OF SOLAR MAGNETOGRAMS USING WAVELETS

A-48 FALSE POSITIVE REDUCTION IN LUNG NODULE COMPUTER–AIDED DETECTION BASED ON 3D RANKLET TRANSFORM

A-50 ERROR ESTIMATES FOR LINEAR PDES SOLVED BY WAVELET BASED TAYLOR-GALERKIN SCHEMES

A-52 WAVELET BASED SPECTRAL FINITE ELEMENT SOLUTION OF 2-D ELASTIC WAVE EQUATION

A-54 WAVELET-GALERKIN METHOD FOR THE SOLUTION OF FILTERING EQUATIONS

A-56 WAVELET CONVOLUTION OPERATOR AND GREEN-KERNEL REPRESENTATION OF MECHANICAL SYSTEMS

A-58 OPERATOR SAMPLING: WIDENING SHANNON'S SAMPLING THEOREM

A-60 LOCATING THIN LINES AND ROOF EDGES BY CUSTOM-BUILT MOMENTS

A-62 STABLE BIORTHOGONAL SPLINE WAVELET BASES ON THE INTERVAL

A-64 CLASSIFICATION OF MENINGIOMAS USING DISCRIMINANT WAVELET PACKETS AND LEARNING VECTOR QUANTIZATION

A-65 SIMULTANEOUS TESTS IN THE TIME-FREQUENCY PLANE FOR ELECTROENCEPHALOGRAM SIGNALS

A-66 LOCALLY SUPPORTED WEIGHTED WAVELETS DEFINED ON THE SPHERE AND SPHERE-LIKE SURFACES

A-68 COCHLEAR WAVELET TRANSFORM BASED ON AUDITORY TUNING CURVES

A-70 HÖLDER REGULARITY ESTIMATE VIA HART SMITH TRANSFORM

A-72 THE MATHEMATICAL INSIGHTS OF WAVELET IMAGE COMPRESSION

A-74 THE THRESHOLD OF COMPRESSION IN WAVELET TRANSFORM WITH HAAR'S COEFFICIENTS - NUMERICAL EXAMPLES

A-76 DIRECTIONLETS: ANISOTROPIC MULTI-DIRECTIONAL REPRESENTATION WITH SEPARABLE FILTERING

A-78 SPEED AND HEART RATE SCALING BEHAVIOR IN MARATHON RACES

A-80 CLASSIFICATION OF HUMAN OSTEOSARCOMA CELLS VIA WAVELET TRANSFORM AND AR PARAMETRIC MODELING OF T-RAY PULSED SIGNALS