Mathematics and Image Analysis 2006, MIA'06*
Scientific Program

All talks will take place in Amphi 8, second floor.
Monday, September 18th, 2006

09:30 - 10:00	Registration	Breakfast**
10:00 - 11:00	S. Kichenassamy	The mathematical analysis of the Perona-Malik equation and its practical impact
11:00 - 12:00	Jean Ponce	Geometry and 3D computer vision: What we (kind of) know how to do, what we don't, and why anyone should care
12:00 - 14:00		DEJEUNER - LUNCH**
14:00 - 15:15	Baba Vemuri	A novel mathematical model for the diffusion weighted MR signal reconstruction
15:15 - 15:45	Maxime Descoteaux	Processing High Angular Resolution Diffusion Imaging Data to Recover Crossing Fibers
15:45 - 16:15		Pause Cafe - Coffee Break**
16:15 - 16:45	Bernhard Burgeth	Mathematical Morphology for Matrix-Fields: Ordering vs PDE
16:45 - 17:15	Nir Sochen	Geometric flows over Lie Groups
17:15 - 18:15	Xavier Pennec	Statistical Computing on Manifolds: From Riemannian Geometry to Computational Anatomy

Tuesday, September 19th, 2006

09:00 - 11:00	Jean-P. Zolesio	Shape Tube Metric and Geodesic Characterisation
11:00 - 11:15		Pause Cafe - Coffee Break**
11:15 - 12:30	Stephane Lafon	Diffusion geometries for dimensionality reduction in image analysis
12:30 - 14:00		DEJEUNER - LUNCH**
14:00 - 15:30	D. Terzopoulos	Deformable and Functional Models in Medical Image Analysis
15:30 - 15:45		Pause Cafe - Coffee Break**
15:45 - 16:15	Leo Grady	Computing Exact Discrete Minimal Surfaces: Extending and Solving the Shortest Path Problem in 3D with Application to Segmentation
16:15 - 16:45	Jean-Ph. Pons	Upgrading the level set method: point correspondence, topological constraints and deformation priors
16:45 -		Short Break
16:45 - 17:15	David Tschumperle	Fast Anisotropic Smoothing of Multi-Valued Images using Curvature-Preserving PDE's
17:15 - 17:45	Stanley Durrleman	Definition of anisotropic de-noising operators through sectional curvature, wide range of applications from gray-level images to high resolution Doppler spectrum

Wednesday, September 20th, 2006

9:45 - 10:45	Kaleem Siddiqi	Medial Representations
10:45 - 11:30	Pedro Felzenszwalb	Representation and Detection of Shapes in Images
11:30 -		short break
11:30 - 12:00	Samir Chafik	Geometrical Analysis of Facial Surfaces
12:00 - 12:30	Tammy Riklin-Raviv	Shape Based Segmentation
12:15 - 14:00		DEJEUNER - LUNCH**
14:00 - 15:00	Luminita Vese	Meyer's models for image decomposition and computational approaches
15:00 - 15:30	Pierre Weiss	Some applications of L infinite norms in image processing.
15:30		Short break
15:30 - 16:15	Didier Auroux	Image restoration and classification by topological asymptotic expansion
16:15 - 16:45	He Lin	MR Image reconstruction by using the iterative refinement method and nonlinear inverse scale space methods

Thursday, September 21st, 2006

09:45 - 11:15	Ch. Schnoerr	Variational Analysis of Fluid Flow Image Sequences
11:15		Short break
11:15 - 12:15	Tal Nir	Over-Parameterized Variational Optical Flow
12:15 - 14:00		DEJEUNER - LUNCH**
14:00 - 15:00	Michael Elad	Sparse and Redundant Signal Representation, and its Role in Image Processing
15:00 - 16:00	Jean-Luc Starck	Morphological Component Analysis
16:00		End of the conference

*Conference MIA'06 is organized by GDR CNRS MSPC with support of CEREMADE, Universite Paris Dauphine, INRIA, Thales Air Defence and DGA.

**Coffee breaks will be complimentary next to Amphi 8. Lunch is not provided by the conference. Participants are free to get lunch from different places inside (Second floor or Rez de Chaussee) or outside the university. Many restaurants can be found by taking the bus PC1 one or two stops to Porte Maillot or Porte des ternes or the metro to Victor Hugo one station away.

Didier AUROUX	Image restoration and classification by topological asymptotic expansion
Bernhard Burgeth	Mathematical Morphology for Matrix-Fields: Ordering vs PDE
Samir Chafik	Geometrical Analysis of Facial Surfaces
Maxime Descoteaux	Processing High Angular Resolution Diffusion Imaging Data to Recover Crossing Fibers
Stanley Durrleman	Definition of anisotropic de-noising operators through sectional curvature, wide
Michael Elad	Sparse and Redundant Signal Representation, and its Role in Image Processing
Pedro Felzenszwalb	Representation and Detection of Shapes in Images
Leo Grady	Computing Exact Discrete Minimal Surfaces: Extending and Solving the Shortest Path Problem in 3D with Application to Segmentation
Satyanad Kichenassamy	The mathematical analysis of the Perona-Malik equation and its practical impact
Stephane Lafon	Diffusion geometries for dimensionality reduction in image analysis
Tal Nir	Over-Parameterized Variational Optical Flow
Xavier Pennec	Statistical Computing on Manifolds: From Riemannian Geometry to Computational Anatomy
Jean Ponce	Geometry and 3D computer vision: What we (kind of) know how to do, what we don't, and why anyone should care
Jean-Philippe Pons	Upgrading the level set method: point correspondence, topological constraints and deformation priors
Christoph Schnoerr	Variational Analysis of Fluid Flow Image Sequences
Kaleem Siddiqi	Medial Representations
Nir Sochen	Geometric flows over Lie Groups
Jean-Luc Starck	Morphological Component Analysis
David Tschumperle	Fast Anisotropic Smoothing of Multi-Valued Images using Curvature-Preserving PDE's
Demetri Terzopoulos	Deformable and Functional Models in Medical Image Analysis
Baba Vemuri	A novel mathematical model for the diffusion weighted MR signal reconstruction
Luminita Vese	Meyer's models for image decomposition and computational approaches
Pierre Weiss	Some applications of L infinite norms in image processing.
Jean Paul Zolesio	Shape Tube Metric and Geodesic Characterisation