

Workshop Programme

1st International Workshop on Deep Structure, Singularities, and Computer Vision,
June 9-10, 2005

Thursday, June 9, Flendrigzaal azM

09:00-09:05 Welcome Address

09:05-10:05 Invited Lecture 1

The Role of Scale in Extracting Geometric Features from Images
James Damon

10:05-11:05 Regular Session 1

Blurred Correlation versus Correlation Blur
Jan Koenderink, Andrea van Doorn

A Scale Invariant Covariance Structure on Jet Space
Bo Markussen, Kim Steenstrup Pedersen, Marco Loog

11:05-11:30 Coffee Break*

11:30-12:30 Regular Session 2

Essential Loops and their Relevance for Skeletons and Symmetry Sets
Arjan Kuijper, Ole Fogh Olsen

Pre-Symmetry Sets of 3D Shapes
Andre Diatta, Peter Giblin

12:30-14:00 Lunch*

14:00-15:30 Regular Session 3

Deep Structure of Images in Populations via Geometric Models in Populations
Stephen Pizer, Ja-Yeon Jeong, Robert Broadhurst, Sean Ho, Joshua Stough

Estimating the Statistics of Multi-Object Anatomic Geometry Using Inter-Object Relationships
Stephen Pizer, Ja-Yeon Jeong, Conglin Lu, Keith Muller, Sarang Joshi

Histogram Statistics of Local Model-Relative Image Regions
Robert Broadhurst, Joshua Stough, Stephen Pizer, Edward Chaney

15:30-16:00 Coffee Break*

16:00-16:15 Poster Teasers

Exploiting Deep Structure
Arjan Kuijper

Scale-Space Hierarchy of Singularities
Tomoya Sakai, Atsushi Imiya

Computing 3D Symmetry Sets; A Case Study
Arjan Kuijper, Ole Fogh Olsen

Irradiation orientation from obliquely viewed texture
Sylvia Pont, Jan Koenderink

Using Top-Points as Interest Points For Image Matching
Bram Platel, Evguenia Balmachnova, Luc Florack, Frans Kanters, Bart ter Haar Romeny

Transitions of Multi-Scale Singularity Trees
Kerawit Somchaieng, Jon Sporring, Sven Kreiborg, Peter Johansen

A Comparison of the Deep Structure of Alpha Scale Spaces
Remco Duits, Frans Kanters, Luc Florack, Bart ter Haar Romeny

A Note on Local Morse Theory in Scale Space and Gaussian Deformations
Jan-Cees van der Meer

16:15-18:00 Poster Session

19:30-24:00 Dinner* at Restaurant Tout à Fait, St. Bernardusstraat 16-18

Friday, June 10, Greepzaal azM

09:00-09:05 Introduction (Luc Florack)

09:05-10:05 Invited Lecture 2

Feature Selection and Many-to-Many Matching in Scale-Space
Ali Shokoufandeh

10:05-11:05 Regular Session 4

The Bessel Scale-Space
Bernhard Burgeth, Stephan Didas, Joachim Weickert

Linear Image Reconstruction from Sparse Set of Scale-Space Features by Means of Inner Products of Sobolev Type
Remco Duits, Bart Janssen, Frans Kanters, Luc Florack

11:05-11:30 Coffee Break*

11:30-12:30 Regular Session 5

A Riemannian Framework for the Processing of Tensor-Valued Images
Pierre Fillard, Vincent Arsigny, Nicholas Ayache, Xavier Pennec

From Stochastic Completion Fields to Tensor Voting
Markus van Almsick, Remco Duits, Erik Franken, Bart ter Haar Romeny

12:30-14:00 Lunch*

14:00-15:00 Invited Lecture 3

On the use of the medial scaffold for shape representation and registration
Benjamin Kimia

15:00-15:30 Regular Session 6

Deep Structure from a Geometric Point of View
Luc Florack

15:30-16:00 Coffee Break*

16:00-17:00 Regular Session 7

Maximum Likely Scale Estimation
Marco Loog, Kim Steenstrup Pedersen, Bo Markussen

Adaptive Trees and Pose Identification from External Contours of Polyhedra
Yannick Kergosien

17:00 The End