Call for Participation

INTERNATIONAL SYMPOSIUM ON MATHEMATICAL MORPHOLOGY

and its Applications to Image and Signal Processing IV

June 3-5, 1998, Amsterdam, The Netherlands

Organised by CWI Amsterdam and University of Groningen

PROGRAM DESCRIPTION

This symposium is the fourth in a series of international workshops devoted to the area of mathematical morphology and its applications in image and signal processing. The scientific programme includes presentation of invited talks and contributed papers.

See the ISMM'98 home page on the World Wide Web at
`http://www.cwi.nl/projects/morphology/ismm98/`

Conference Chairs

Henk J.A.M. Heijmans
CWI
Kruislaan 413
NL 1098 SJ Amsterdam
The Netherlands

email: henkh@cwi.nl
tel: +31 20 5924057
fax: +31 20 5924199

Jos B.T.M. Roerdink
Department of Computing Science
University of Groningen
P.O. Box 800
9700 AV Groningen
The Netherlands

roe@cs.rug.nl
+31 50 3633931
+31 50 3633800

Programme Committee

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Goutsias, J.	USA
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Schmitt, M.	France
Schonfeld, D.	USA
Serra, J.	France
Vincent, L.	USA
Wojciechowski, K.	Poland

Invited Lectures

B. Kimia (USA): *Curve Evolution, Wave Propogation, and Mathematical Morphology*
I. Molchanov (Scotland): *Grey-scale Images and Random Sets*
J.-M. Morel (France): *Image Iterative Filtering and Partial Differential Equations*
S. M. Pizer (USA): *2D & 3D Figural Models of Anatomic Objects from Medical Images*
J.S. Ploem (Netherlands): *The Creation of Computer Graphics with Mathematical Morphology*

Programme Outline

TUESDAY	**June 2, 1998**
19.30-21.30	Reception
WEDNESDAY	**June 3, 1998**
08.40-08.45	**Opening Remarks**
08.45-09.30	*J.-M. Morel*, Geometric Partial Differential Equations and Iterative Filtering (*Invited paper*)
09.30-10.10	*D. Wagner, M. Tajine and C. Ronse*, An approach to discretization based on the Hausdorff metric
	J.L Diaz de Leon S, and J.H. Sossa-Azuela, Mathematical morphology based on metric spaces
10.10-10.40	**Break**
10.40-11.40	*A.T Popov*, Numerical and approximation tools based on mathematical morphology
	P. Soille, Grey scale convex hulls: definition, implementation, and application
	L. Gu, T. Kaneko and N. Takana, Morphological segmentation applied to character extraction from color cover images
11.40-12.25	*J.S. Ploem*, The creation of computer graphics with mathematical morphology (*Invited paper*)
12:25-14:00	**Lunch**
14:00-15:40	*M.H. Sedaaghi and Q.H. Wu*, The power of morphological filters alone and when combined with linear filtering
	M. Schmitt, Digitization and connectivity
	I.R. Terol Villalobos, Toggle mappings and some related transformations: a study of contrast enhancement
	V. Starovoitov, Touching distances and distance transform
	E.R. Dougherty and J. Barrera, Prior information in the design of optimal binary filters
15:40-16.10	**Break**
16.10-17.50	*J. Serra*, Hausdorff distances and interpolations
	S.M. Lea and M. Lybanon, Shoaling waves and water depth determination using mathematical morphology
	K. Sivakumar, J. Goutsias, Monte Carlo simulation and statistical inference of morphologically constrained GRF's
	H. Talbot, C. Evans, and R. Jones, Complete ordering and multivariate mathematical morphology
	S. Beucher, Sets, partitions and functions interpolations

THURSDAY	**June 4, 1998**
08.30-09.15	*B. Kimia*, Curve evolution, wave propogation, and mathematical morphology (*Invited paper*)
09.15-10.15	*Hong Li and A. Vossepoel*, Generation of the Euclidean skeleton by a bisector decision rule on a two-shortest-vector distance map
	R. Kresch, Extension of morphological operations to complete semilattices and its applications to image and video processing
	A. Bieniek and A. Moga, A connected component approach to the watershed segmentation
10.15-10.40	**Break**
10.40-12:20	*I. Bloch*, Fuzzy geodesic mathematical morphology from fuzzy geodesic distance
	J. Chanussot and P. Lambert, An application of mathematical morphology to road network extraction on SAR images
	J. Barrera and E.R. Dougherty, Representation of gray-scale windowed operators
	P. Soille, Morphological Unwrapping of interferometric phase-maps
	A. Gasteratos, I. Andreadis, and Ph. Tsalides, Soft morphological structuring element decomposition
12:20-14:00	**Lunch**
14.00-14.45	*I.S. Molchanov*, Grey-scale images and random sets (*Invited paper*)
14.45-15.45	*H. Hontani, M. Nakao,and K. Deguchi*, A figure splitting method based on the multi-resolution skeleton
	Ph. Salembier, L. Garrido, and D. Garcia, Auto-dual connected operators based on iterative merging algorithms
	E. Stringa and C.S. Regazzoni, Parameter analysis of conditional morphological operators for image restoration
15.45-16.10	**Break**
16.10-17.30	*F. Meyer*, From connected operators to levelings
	E. Decenciere Ferrandiere, Segmentation-based motion compensation
	P. Maragos and M.A. Butt, Advances in differential morphology: image segmentation via eikonal PDE & curve evolution and reconstruction via constrained dilation flow
	N. Friel and I.S. Molchanov, Distances between grey-scale images
19.00-22.30	**Conference Dinner**

FRIDAY	**June 5, 1998**
08.30-10.10	*J. Barrera, C.E. Ferreira and R.F. Hashimoto*, Finding optimal sequential decompositions of erosions and dilations *J. Chanussot and P. Lambert*, Total ordering based on space filling curves for multivalued morphology *F. Meyer*, The levelings *E.J. Breen*, Morphological segmentation of non-image data: the closing function *M.C. D'Ornellas and R. van den Boomgaard*, Generic algorithms for morphological image operators: a case study using watersheds
10.10-10.35	**Break**
10.35-11.20	*S.M. Pizer*, 2D & 3D figural models of anatomic objects from medical images (*Invited paper*)
11.20-12.20	*R. Vogt, S. Stokely, and G. Fliss*, Morphological processing of ground-to-ground radar image sequences *F. Zana, I. Meunier, and J.C. Klein*, A region merging algorithm using mathematical morphology: application to macula detection *C.-H. Demarty and S. Beucher*, Color segmentation algorithm using an HLS transformation
12:20-14:00	**Lunch**
14:00-15:40	*A.V. Tuzikov, J.B.T.M. Roerdink, H.J.A.M. Heijmans, and S.V. Sheynin*, Measures and indices of reflection symmetry for convex polyhedra *C. Cotsaces and I. Pitas*, Computing the watersheds of large three dimensional images using limited random access memory *L. Vincent*, Minimal path algorithms for the robust detection of linear features in gray images *V. Vilaplana and F. Marques*, Face segmentation using connected operators *R. van den Boomgaard*, Numerical solutions of morphological partial differential equations
15.40-16.10	**Break**
16.10-17.10	*S. Sheynin, A.V. Tuzikov, and O. Krivonos*, Computation of the opening transform *M.N.M. van Lieshout*, Size-biased random closed sets *V.M. Kiiko and M.I. Schlesinger*, Fast dilation and skeletonization of compressed binary pictures

Fee and Registration

Early registration (before April 1)	NLG 700
Late registration (after April 1)	NLG 850
Cancellation fee (before May 15)	NLG 250

The programme fee includes one copy of the proceedings, refreshments during breaks, a reception and conference dinner. To register, please complete the attached registration form and return it to the ISMM'98 secretariat:

Mrs. L.M. v.d. Eersten-Schultze
CWI
Kruislaan 413
NL 1098 SJ Amsterdam
The Netherlands
email: lieke@cwi.nl
tel: +31 20 592 4189
fax: +31 20 592 4199

Registrants will be permitted to attend only if arrangements for payment have been made prior to the start of the programme. If you must register within ten working days or less before the programme is to begin, and you are paying by check, please do not mail the payment, but bring it with you the first day of the programme.

Conference site

The symposium will take place at the **Royal Tropical Institute**, one of the leading research institutes in the Netherlands on agricultural development and tropical health. The Tropical Museum, once a typical anthropological museum, has been transformed into a modern Third World Museum, explaining development topics and paying attention to everyday's life in Third World countries. The museum's permanent exhibition includes fine Indonesian arts.

Royal Tropical Institute
Mauritskade 63, Amsterdam
Tel: +31 20 568 8711
Fax: +31 20 668 4579

Accommodation

The following three hotels in Amsterdam provide lodging at reduced rates:
Tulip Inn Oosterpark (next to conference site)
Linnaeusstraat 2c, 1092 CK Amsterdam
Tel: +31 20 6925111, Fax: +31 20 6630979.
Eden hotel (downtown Amsterdam; easy tram connection to the conference site)
Amstel 144, 1017 AE Amsterdam
Tel: +31 20 5307888 Fax: +31 20 6242946.
Delphi hotel (quiet region, somewhat further away from conference site)
Apollolaan 1010105, 1077 AN Amsterdam
Tel: +31 20 6795152 Fax: +31 20 6752941.

Please note that all reservations must be made directly with the hotel in question. Towards that goal one may use the ISMM'98 hotel reservation form available via the ISMM'98 home page. Please make your reservation as soon as possible. The number of rooms available is rather limited.

Transportation

Amsterdam can easily be reached by airplane and by train. There is an excellent train connection between Schiphol airport and Amsterdam.

Registration Form International Symposium on Mathematical Morphology
ISMM'98, June 3-5, 1998, Amsterdam, The Netherlands

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Cancellation fee (before May 15)	NLG 250,-

In case of cancellation after May 15, the registration fee will not be reimbursed. Registration includes one copy of the proceedings, refreshments during breaks, attendance of reception and conference dinner.

Name ______________________ First Name ______________________
Affiliation ______________________
Address ______________________
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Country ______________________
Telephone ____________ Fax ____________ E-mail ____________

wishes to register for ISSM'98 and has transferred the amount of NLG ____________ to the conference Agency by:

[ ] Bank transfer to RABO Bank, Address: Middenweg 88, Amsterdam, account nr 31.35.57.977 of "Stichting Wiskunde en Informatica Conferenties", Amsterdam
[ ] Certified cheques (e.g. eurocheques, valid maximum NLG 300)
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A reference to ISMM'98 must be made on money orders and cheques.

Please return this form by air mail or fax to the ISMM'98 secretariat:

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