New Imaging Techniques
- Analytical study of bioelasticity ultrasound systems
  MF Insana, LT Cook, P Chaturvedi, University of Kansas
- MEG source imaging using multipolar expansions
  JC Mosher, RM Leahy, DW Shattuck, S Baillet, Los Alamos Nat Lab, Univ Southern California
- Binary tomography for triplane cardiology
  BM Carvalho, GT Herman, S Matej, C Salzberg, E Vardi, University Penn, Technion Tech Inst
- Real-time 3D brain shift compensation
  OM Skrinjar and JS Duncan, Yale University

3D Ultrasound and PET
- Computer assisted human follicle analysis for fertility prospects with 3D ultrasound
  BM ter Haar Romeny, B Titulaer, S Kalitzin, G Scheffer, F Broekmans, J Stall, E te Velde, Utrecht University
- Volume measurement in sequential freehand 3D ultrasound
  GM Treece, RW Prager, AH Gee, L Berman, Cambridge University
- Automated identification and measurement of objects via populations of medial primitives with application to real-time 3D echocardiography
  GD Stetten, SM Pizer, University of North Carolina, Duke University
- Continuous time dynamic PET imaging using list mode data
  TE Nichols, J Qi, RM Leahy, Carnegie Mellon, University of Southern California

Segmentation
- Hybrid Geometric active models for shape recovery in medical images
  Y Guo, BC Vemuri, Sarnoff Corp and University of Florida
- Co-dimension 2 geodesic active contours for MRA segmentation
  L Lorigo, O Faugeras, WEL Grimson, R Keriven, R Kikinis, C-F Westin, MIT and INRIA
- An adaptive fuzzy segmentation algorithm for 3-D MR images
  DL Pham and JL Prince, Johns Hopkins University and NIH
- Automatic detection and segmentation of evolving processes in 3-D medical images: application to multiple sclerosis, D Rey, G Subsol, H Delingette, N Ayache, INRIA, France

Poster Session I 14 posters presented
Image Analysis of the Brain Cortex

- Registration of cortical anatomical structures via robust 3-D point matching
  H Chui, J Rambo, J Duncan, R Schultz, A Rangarajan, Yale University

- Hierarchical matching of cortical features
  M Vaillant, C Davatzikos, Johns Hopkins University

- Using local geometry to build 3-D sulcal models
  A Caunce, CJ Taylor, University of Manchester

- ANIMAL + INSECT: improved cortical structure segmentation
  DL Collins, AP Zijdenbos, WFC Baare, AC Evans, McGill University

Registration

- Consistent linear-elastic transformations for image matching
  GE Christensen, University Iowa

- Non-linear registration with the variable viscosity fluid algorithm
  H Lester SR Arridge, KM Jansons, L Lemieux, JV Hajnal, A Oatridge
  University College London, Hammersmith Hospital

- Approximating thin-plate splines for elastic registration: integration of landmark errors and orientation attributes,
  K Rohr, M Fornefett, HS Stiehl, Hamburg University

- A hierarchical feature based deformation model applied to 4-D cardiac SPECT data
  JK Laading, C McCulloch, VE Johnson, DR Gilland, RJ Jaszczak, Duke University

Poster Session II  14 posters presented

Feature Detection and Modeling

- Local orientation distribution as a function of spatial scale for detection of masses in mammograms
  N Karssemeijer, University Hospital Nijmegen

- Physiologically oriented models of the hemodynamic response in functional MRI
  F Kruggel, DY von Cramon, Max-Planck Institute of Cognitive Neuroscience

- 3-D graph description of the intracerebral vasculature from segmented MRA
  E Bullitt, S Aylward, A Liu, J Stone, SK Mukherji, C Coffey, G Gerg, SM Pizer
  University of North Carolina

- A unified framework for atlas matching using active appearance models
  TF Cootes, C Beeston, GJ Edwards, CJ Taylor, University of Manchester