

[Topology Atlas](#) || [Conferences](#)

**EUROMECH 406
IMAGE PROCESSING
METHODS IN
APPLIED
MECHANICS**
May 6-8, 1999
Euromech Society
Warsaw, Poland

Organizers
**Tomasz A.
Kowalewski,
Witold Kosinski,
Juergen
Kompenhans**

[View Abstracts
Conference
Homepage](#)



[Euromech 406](#)

- [Objectives](#)
- [Topics](#)
- [PROGRAM](#)
- [MG&V Full Papers](#)
- [Scientific Committee](#)
- [Organizing Committee](#)
- [Keynote Lectures](#)
- [Conference Secretariat](#)
- [First Announcement](#)
- [Short Abstracts \(AMCA\)](#)
- [Fees](#)
- [Accommodation](#)
- [Participants List](#)
- [Euromech Report](#)
- [Visit our Sponsors!](#)

Last modification 4.02.00

Using Ccontinuum Mechanics for Detection and Quantification of Evolving Processes in 3D Medical Images

by

David Rey

EPIDAURE Project, INRIA 2004, route des
Lucioles. B.P. 93 06902 SOPHIA ANTIPOLIS.
FRANCE

Coauthors: Hervé Delingette, Gérard Subsol,
Nicholas Ayache

Physicians often perform diagnoses based on the evolution of lesions, tumours or anatomical structures through time. The objective of this paper is to describe several vector field operators to detect regions with local variations between two 3D images. Those operators are applied to displacement fields obtained after a non-rigid registration between successive 3D temporal images. Because we want to study the deformations between several temporal states, continuum mechanics is well suited for developing such operators.

Date received: January 25, 1999

Copyright © 1999 by the author(s). The author(s) of this work and the organizers of the conference have granted their consent to include this abstract in [Topology Atlas](#). Document # caep-11.