ORGANIZING COMMITTEE

- **João Manuel R. S. Tavares**
  Faculty of Engineering of University of Porto, Portugal
- **Renato M. Natal Jorge**
  Faculty of Engineering of University of Porto, Portugal
- **Maria Amélia Duarte Ferreira**
  Faculty of Medicine of University of Porto, Portugal
- **Francisco J. Perales López**
  University of Balears Island, Spain

CONFERENCE SECRETARIAT

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APMAC

12-14 OCTOBER 2011

VIPIMAGE

ECCOMAS

III ECCOMAS THEMATIC CONFERENCE ON COMPUTATIONAL VISION AND MEDICAL IMAGE PROCESSING

REAL MARINA HOTEL & SPA, OLHÃO
ALGARVE, PORTUGAL

WWW.FE.UP.PT/VIPIMAGE

AIMS AND SCOPE

Computational methodologies of signal processing and analyses, namely considering 2D, 3D and 4D images, are commonly used in different application of the human society. For instances, full automatic or semi-automatic Computational Vision systems have been increasing used for surveillance tasks, traffic analysis, recognition process, inspection purposes, human-machine interfaces, 3D vision and deformation analysis.

One of the main characteristics of the Computational Vision domain is its inter-multidisciplinarity. In fact, in this domain are usually used methodologies of several more basic sciences, such as Informatics, Mathematics, Statistics, Psychology, Mechanics and Physics. Besides this inter-multidisciplinary characteristic, one of the main reasons that contributes for the continually effort done in this domain of the human knowledge is the number of applications that exists in the medical area. For instance, it is possible to consider the use of statistical or physical procedures on medical images in order to model the represented structures. This modeling can have different goals, for example: shape reconstruction, organs segmentation in images, images registration, behavior simulation, motion and deformation analysis, virtual reality, computer-assisted therapy or tissue characterization.

The main objective of these ECCOMAS Thematic Conferences on Computational Vision and Medical Image Processing is to promote a comprehensive forum for discussion on the recent advances in the related fields trying to identify widespread areas of potential collaboration between researchers of different sciences.

CONFERENCE TOPICS

- Image Processing and Analysis
- Tracking and Analyze Objects in Images
- Segmentation of Objects in Images
- 3D Vision
- Signal Processing
- Data Interpolation, Registration, Acquisition and Compression
- Objects Simulation
- Virtual Reality
- 3D Vision
- Software Development for Image Processing and Analysis
- Computer Aided Diagnosis, Surgery, Therapy, and Treatment
- Computational Bioimaging and Visualization
- Telemedicine Systems and their Applications

INVITED LECTURES

Armando J. Pinho - University of Aveiro, Portugal
"Finite-context models for image compression"

Irene M. Gamba - The University of Texas at Austin, USA
"Deterministic vs DSMC solvers for Boltzmann-Poisson dynamics of charged transport in nano structures"

Marc Pollefeys - ETH Zurich, Switzerland
"3D from Video for Static and Dynamic Scenes"

Marc Thiriet - Universite Pierre et Marie Curie (Paris VI), France
"Thoracic image processing for nanoparticle delivery"

Xavier Roca Marvà - Autonomous University of Barcelona, Spain
"Towards Human-Sequence Evaluation"

Stan Sclaroff - Boston University, USA
"Embedding Methods for Image and Video Retrieval"

REGISTRATION

	EARLY	LATE
IACM/ECCOMAS Members	400€	475€
Non-IACM/ECCOMAS Members	450€	525€
Students	250€	300€
Accompanying Persons	150€	200€
Book of Proceedings	100€	125€

THE FEES COVER:

- Book of proceedings (except for students registration)
- Participation in all the scientific sessions
- Coffee breaks
- Lunch on the Conference days
- Welcome reception
- Conference Banquet
- For Accompanying Persons: welcome reception and conference banquet

NOTES:

- Early registration fee must be received until 31st May 2011
- Each accepted paper should have, at least, one non-student registration

SCIENTIFIC COMMITTEE

- **Adelino F. Leite-Moreira** University of Porto, Portugal
- **Ahmed El-Rafei** Friedrich-Alexander University Erlangen-Nuremberg, Germany
- **Ahmed Fadiel** New York University Medical Centre, USA
- **Alberto De Santis** Università degli Studi di Roma "La Sapienza", Italy
- **Alejandro F. Frangi** Universitat Pompeu Fabra, Spain
- **Alexandre Cunha** California Institute of Technology, USA
- **Amr R. Abdel-Dayem** Laurentian University, Canada
- **Ana Mafalda Reis** University of Porto, Portugal
- **André R. S. Marçal** University of Porto, Portugal
- **André Vital Saúde** Federal University of Lavras, Brazil
- **Andrew D. Bagdanov** Computer Vision Center, Spain
- **Antonio Vernet** Universitat Rovira i Virgili, Spain
- **Armando Sousa** University of Porto, Portugal
- **Arrate Muñoz Barrutia** University of Navarra, Spain
- **Aubrecht Christoph** AIT Austrian Institute of Technology GmbH, Austria
- **Bernard Gosselin** Faculte Polytechnique de Mons, Belgium
- **Bhargab B. Bhattacharya** Indian Statistical Institute, India
- **Bogdan Raducanu** Computer Vision Center, Spain
- **Charles A. Taylor** Stanford University, USA
- **Christos Constantinou** Stanford University, USA
- **Christos Grecos** University of West of Scotland, UK
- **Constantino Reyes-Aldasoro** The University of Sheffield, UK
- **Daniela Iacoviello** Università degli Studi di Roma "La Sapienza", Italy
- **David A. Steinman** University of Toronto, Canada
- **Djemel Ziou** Universite de Sherbrooke, Canada
- **Durval C. Costa** HPP Medicina Molecular, S.A., Portugal
- **Eduardo Borges Pires** Instituto Superior Técnico, Portugal
- **Eduardo Soudah Prieto** International Center for Numerical Methods in Engineering, Spain
- **Emmanuel A. Audenaert** Ghent University Hospital, Belgium
- **Enrique Alegre Gutiérrez** University of León, Spain
- **Eugenio Oñate** Universitat Politècnica de Catalunya, Spain
- **Fernão Abreu** University of Aveiro, Portugal
- **Filipa Sousa** University of Porto, Portugal
- **Fiorella Sgallari** University of Bologna, Italy
- **George Bebis** University of Nevada, USA
- **George Papaioannou** University of Wisconsin Milwaukee, USA
- **Gerald Schaefer** Loughborough University, UK
- **Gerhard A. Holzapfel** Royal Institute of Technology, Sweden
- **Helcio R. B. Orlande** Federal University of Rio de Janeiro, Brazil
- **Helder Rodrigues** Instituto Superior Técnico, Portugal
- **Hemerson Pistori** Dom Bosco Catholic University, Brazil
- **Henryk Palus** Silesian University of Technology, Poland
- **Hugo Proença** University of Beira Interior, Portugal
- **Huiyu Zhou** Queen's University Belfast, UK
- **Isabel M. A. P. Ramos** University of Porto, Portugal
- **Ioannis Pitas** Aristotle University of Thessaloniki, Greece
- **J. Paulo Vilas-Boas** University of Porto, Portugal
- **J. Tinsley Oden** University of Texas at Austin, USA
- **Jackie (Jianhong) Shen** Shanghai Jiaotong University, China
- **Jaime S. Cardoso** University of Porto, Portugal
- **Jan C. de Munck** VU University Medical Center, The Netherlands
- **Javier Melenchón** Universitat Oberta de Catalunya, Spain
- **Jeffrey A. Weiss** University of Utah, USA
- **Jerome Darbon** CNRS/ENS Cachan, France
- **Jimmy T. Efird** University of North Carolina, USA
- **João M. A. Rebello** Federal University of Rio de Janeiro, Brazil
- **João Paulo Papa** São Paulo State University, Brazil
- **João Sanches** Instituto Superior Técnico, Portugal
- **Joaquin Jorge** Instituto Superior Técnico, Portugal
- **Joaquim Silva Gomes** University of Porto, Portugal
- **Jordi Gonzàlez** Centre de Visió per Computador, Spain
- **Jorge M. G. Barbosa** University of Porto, Portugal
- **Jorge S. Marques** Instituto Superior Técnico, Portugal
- **Jose M. García Aznar** University of Zaragoza, Spain
- **Jun Zhao** Shanghai Jiao Tong University, China
- **Khan M. Iftekharuddin** The University of Memphis, USA
- **Kristian Sandberg** Computational Solutions, USA
- **Laurent Cohen** Universite Paris Dauphine, France
- **Lionel Moisan** Université Paris V, France
- **Lyuba Alboul** Sheffield Hallam University, UK
- **Luís Amaral** Polytechnic Institute of Coimbra, Portugal
- **Luís Paulo Reis** University of Porto, Portugal
- **M. Emre Celebi** Louisiana State University in Shreveport, USA
- **Mahmoud El-Sakka** The University of Western Ontario, Canada
- **Manuel González Hidalgo** University of the Balearic Islands, Spain
- **Manuel Laranjeira** University of Porto, Portugal
- **Manuel Ujaldon** University of Malaga, Spain
- **Manuele Bicego** University of Verona, Italy
- **Marcos Rodrigues** Sheffield Hallam University, UK
- **Maria Petrou** Imperial College London, UK
- **Mário Forjaz Secca** Universidade Nova de Lisboa, Portugal
- **Mário M. Freire** University of Beira Interior, Portugal
- **Masud Rahman** Department of Infrastructure, Transport, Regional Services and Local Government, Australia
- **Meng-Xing Tang** Imperial College London, UK
- **Michel Audette** Kitware, USA
- **Miguel Tavares da Silva** Instituto Superior Técnico, Portugal
- **Miguel Velhote Correia** University of Porto, Portugal
- **Mislav Grgic** University of Zagreb, Croatia
- **Mónica N. S. Oliveira** University of Porto, Portugal
- **Naira H. Campbell-Kyureghyan** University of Wisconsin-Milwaukee, USA
- **Nguyen Dang Binh** Hue University, Viet Nam
- **Nicholas Ayache** Institut National de Recherche en Informatique et Automatique, France
- **Paola Lecca** The Microsoft Research, Italy
- **Patrick Dubois** Inserm University Hospital of Lille, France
- **Paulo Flores** University of Minho, Portugal
- **Pawel A. Penczek** The University of Texas, USA
- **Philippe G. Young** University of Exeter, UK
- **Pierluigi Maponi** University of Camerino, Italy
- **Rainald Lohner** George Mason University, USA
- **Reneta Barneva** State University of New York at Fredonia, USA
- **Rui Lima** Polytechnic Institute of Braganca, Portugal
- **Sabina Tangaro** Istituto Nazionale di Fisica Nucleare, Italy
- **Slimane Larabi** USTHB University, Algeria
- **Susana Branco Silva** Instituto de Biofisica e Engenharia Biomédica, Portugal
- **Teresa Mascarenhas** University of Porto, Portugal
- **Tolga Tasdizen** University of Utah, USA
- **Thierry Brouard** University of Tours, France
- **W. Jong Yoon** Qatar University, Qatar
- **Xue-Cheng Tai** University of Bergen, Norway
- **Yongjie (Jessica) Zhan** Carnegie Mellon University, USA
- **Zeyun Yu** University of Wisconsin at Milwaukee, USA

PROCEEDINGS

Extended abstracts (for submission): 2 to 4 (recommended) A4 pages must be considered.

The abstract must provide authors' names and affiliation, and should also include a title and keywords.

All extend abstracts submitted will be subjected to a review process by three members of the conference scientific committee.

The proceedings book will be published by the Taylor & Francis Group.

Additionally, the organizers will encourage the submission of extended versions of the accepted papers to related International Journals; namely, for special issues dedicated to the conference.

Two possibilities are the International Journal for Computational Vision and Biomechanics and the International Journal of Imaging. Furthermore, a book with 20 invited works from the most important ones presented in VipIMAGE2011 will be published by Springer.

THEMATIC SESSIONS

Experts on related conference topics are invited to submit proposals for thematic sessions.

The organizers of the selected thematic sessions will be included in the conference scientific committee and will have a reduced registration fee. They will be responsible for the dissemination of their thematic session, may invite expertise researchers to have invited keynotes during their session and will participate in the review process of the submitted contributions.

IMPORTANT DATES

Deadline for Thematic Sessions proposals: **15th January 2011**
Thematic Sessions notification: **31th January 2011**
Deadline for Extended Abstracts: **15th March 2011**
Authors Notification: **15th April 2011**
Deadline for Lectures and Papers: **15th June 2011**

ACCOMODATION

The organizers have arranged special conditions and rates at REAL MARINA HOTEL & SPA for the conference participants.

Service	Single Room	Double Room	Remark
Accommodation in single room (buffet breakfast and taxes included)	88€	98€	Free internet in the rooms

Additional, near the REAL MARINA HOTEL & SPA, other accommodation facilities are available.

AWARDS

"best paper award" and **"best student paper award"** are going to be given to the author(s) of two papers presented at the conference, selected by the Organizing Committee based on the best combined marks from the Scientific Committee and Session Chairs.