



*Under the Patronage of H.E. President of the Republic of Cyprus*

The 14th International Conference on Virtual Systems and Multimedia

## Digital Heritage: Our Hi-tech-STORY for the Future

Technologies to Document, Preserve, Communicate,  
and Prevent the Destruction of our Fragile Cultural Heritage

**October 20 – 26th, 2008**

**Amathus Hotel, Limassol, Cyprus**

[www.vsmm2008.org](http://www.vsmm2008.org)

### Call for Papers and Participation

You are kindly invited to submit a paper to the VSMM 2008 joint conference which will provide an opportunity to exchange research results, opinions, experiences and proposals on the best practice and hi-tech virtual, multimedia, and Information and Communications Technologies to document, preserve, manage and communicate Cultural Heritage (CH). In the long tradition of the VSMM Society, this cross-disciplinary event brings together *artists, archaeologists, architects, game designers, historians, surveyors, museologists, librarians, archivists, software developers, and engineers* from across the globe around this year's common theme of *technology applied to heritage*.

To be held at the 5-star Amathus Beach Hotel in Limassol, Cyprus, the Conference is supported by a Scientific Committee of 100 renowned CH professionals for a blind peer review of all submitted papers. The main goal of the event is not only to illustrate the programs underway but also excellent work wherever it is located and however it is supported, in order to promote a common approach to the tasks of e-documentation of World Heritage. To reach this ambitious goal the topics covered will include experiences in the use of innovative recording technologies & methods and how to take best advantage to integrate the results obtained to build up new tools and/or experiences as well as improved methodologies for documenting, managing, and communicating heritage. Furthermore, regional capacities in Cultural Heritage and IT will be facilitated in advancing their know-how through the exchange of information and generation of new ideas and cooperations, where the world meets the finger prints of several ancient civilizations on earth.

***In cooperation with:***



International Council on  
Monuments and Sites  
Conseil International  
des Monuments et des Sites

**The European Digital Library Foundation** (Europeana) and the *European Commission* Projects:

- MINERVA+ (<http://www.minervaeurope.org/whatis/minervaplus.htm>)
- MICHAEL+ (<http://www.michael-culture.org/en/home>)
- The EU Member States' Expert Group on Digitization and Digital Preservation. ([http://ec.europa.eu/information\\_society/activities/digital\\_libraries/mseg/index\\_en.htm](http://ec.europa.eu/information_society/activities/digital_libraries/mseg/index_en.htm))
- CHIRON (<http://www.chiron-training.org/>)
- MultiMatch (<http://www.multimatch.org>)
- ATHENA and EDLocal newly funded projects

## **Keynotes: Digital Libraries, Archives, Museums, and Site Documentation**

Keynotes to include:

- **Javier Hernandez-Ros**, from the European Commission (Head of the Information Society and Media DG, Information Market Unit) who will speak about the ongoing developments of the European Digital Library: "*2010 Digital Libraries' Initiative - Europe's Cultural Heritage at a Click of a Mouse*" and review the activities of stakeholders, the recommendations of the High Level Expert Group on Digital Libraries and the ongoing work toward the launch of EUROPEANA, the multilingual single entry point to Europe's cultural heritage;
- **Massimo Negri**, Director of the European Museum Forum and Member of the Board of the European Digital Library, who will speak about *Libraries, Monuments, Archives, Museums: European Heritage facing the Digital Challenge*;
- **Vassilios Tsingas** Director of Elliniki Photogrammetriki Ltd. and Project Manager of the Development of Geographic Information Systems at the Acropolis of Athens, will present "*Acropolis of Athens: from Ancient Greece to the Digital Age*". This is the first time that one of the existing world wonders will be fully digitally documented using state of the art methodologies and instruments. The project is divided into three basic tasks: the geodetic one, involving field measurements for the generation of a polygonometric network and terrestrial laser scanning of the walls and Acropolis rock and also the Erechtheion monument, the photogrammetric one involving image acquisition, orientation, DSM generation and orthorectification, and finally the development of a GIS database and applications.
- **Donna J. Cox**  
Michael Aiken Chair and Special Advisor to the Provost  
Director Digital Media Initiative focused on Arts and Technology  
Professor, School of Art and Design, College of Fine and Applied Arts  
Director, Advanced Visualization Laboratory (AVL), National Center for Supercomputing Applications (NCSA), University of Illinois at Urbana-Champaign (UIUC)

### **Designing the Digital Imaginary: A Convergence of Art and Supercomputer Science**

Cox will present a visual feast of digital data-driven scientific and artistically rendered visualizations. She and her team have developed new visualization methods and virtual reality tools that provide novel ways for researchers to collaborate over remote distances and high-speed networks. This presentation will demonstrate advanced graphical techniques in the making of 'high art' science for public presentation in a variety of large-format venues including full-dome digital planetariums, IMAX theaters, and high-definition television. These projects include the IMAX film "Cosmic Voyage," nominated for Academy Award and funded by Smithsonian Institute; New York City's American Museum of Natural History's "Passport to the Universe;" and the Denver Museum of Nature and Science "Black Holes: the Otherside of Infinity" digital planetarium show, currently playing at 24 full-dome digital planetariums around the world. She

and her collaborators have thrilled millions of people with visualizations for high-definition television programs including the popular PBS “Hunt for the Supertwister.” These virtual tours provide international audiences with immersive, embodied experiences of our technoscientific culture and the collective digital imaginary

- plus a **Keynote Panel on Digital Archives for Heritage** led by UNESCO.

Special parallel **Workshops/Sessions** additionally include:

- Tutorial on **Terrestrial Laser Scanning Essentials** (National Technical Univ. of Athens)
- Tutorial on **Digital Tools for Recording Heritage Places** (VSMM and CIPA joint event)
- Workshop on **Virtual Reality: Communities and 3D Worlds** (Maurizio Forte and Lily Diaz)
- Workshop on **Open Content – Maximizing Usability of Digital Heritage** (Alexandria Archive)
- Workshop on **Archives Infrastructure: Infrastructure for Digitized Cultural Content in Europe** (Rob Davies and Romana Krizova)
- Workshop on **Digital Heritage Places Recording for Prosperity** (UNESCO and VSMM joint event)
- Workshop on **European Union MICHAEL / MINERVA projects results:**  
The workshop is intended to provide an insight view of the results produced by MINERVA and MICHAEL initiatives, with regards to all the projects carried out since 2002 under the coordination of the Italian Ministry of Cultural Heritage and Activities and involving the Ministries of Culture of all the EU Member States. (Rossella Caffo, Italian Ministry of Cultural Heritage and Activities).
- Workshop on **Multilingual and Multimedia Access to Cultural Heritage Digital Objects: the MultiMatch EU Project Solution** (Pasquale Savino)

Special sessions and presentations:

1. **Knowhow Books- Knowledge transfer** <http://www.tii.se/knowhow/>  
by Halina Gottlieb Interactive Institute, SE and Daniël Pletinckx, Visualdimension, BE

Launched by the Interactive Institute and EPOCH November 2007, the inspirational Knowhow books series catalogues existing examples of a variety of projects that use ICT for the recording, display and interpretation of cultural heritage. Inspired by concepts developed by the partners of the EPOCH Network of Excellence ([www.epoch.eu](http://www.epoch.eu)). Knowhow books are a bridge between research findings and everyday practice for people working in the cultural heritage sector.

2. **NODEM (Nordic Digital Excellence in Museums)** <http://nodem.eu>  
by Halina Gottlieb Interactive Institute, SE and Daniël Pletinckx, Visualdimension, BE

NODEM (Nordic Digital Excellence in Museums) is a professional forum for exchanging knowledge and establishing collaboration between museums, research institutions, galleries, science and discovery centres, cultural/natural heritage sites and similar organisations. NODEM was initiated and is coordinated by the Swedish Forum for Cultural Heritage

- **Topics:**

The VSMM 2008 joint event will focus on interdisciplinary and multi-disciplinary research concerning both cutting edge Cultural Heritage Informatics and use of technology for the representation, documentation, preservation, archiving and communication of CH knowledge. The scope includes every phase of CH information technology: initial data capture/digitization, information/data processing, reconstruction, visualization, preservation and documentation as well as dissemination of results to the scientific and Cultural Heritage communities and to the general public (Multilingual, Multimedia Digital Library). We are also interested in aspects of the wider legal and ethical responsibilities of Cultural Heritage Informatics. Research subjects parallel the interests of UNESCO, European Commission, VSMM, VHN, ICOMOS/ISPRS, CIPA, ICOMOS, ICIP, and EuroMed including culturally significant monuments, artifacts and sites as well as the activities of museums, libraries, archives, and organizations involved with their care. Those researchers who wish to participate in this event are invited to submit papers on original and unpublished work addressing the following subjects:

Documentation, Recording, and Monitoring

- 3D Data Acquisition Technologies & Processing (incl. Photogrammetry and 3D Laserscanning)
- Photographic and image-based recording (digital, panoramic, HDR, satellite, aerial)
- Scanning and automated archiving
- On-site and remotely sensed data collection
- ICT assistance in monitoring and restoration.

Data Mapping, Management, Processing, and Analysis

- 2D and 3D GIS in Cultural Heritage
- Multimedia, Multilingua, Data Management and Archiving
- CAD and FEM based Digital Reconstructions and 3D Modelling
- Construction and indexing of large scale Multimedia/Multilingua Encyclopaedias in Heritage
- Standards, Metadata, Ontologies and Semantic Processing in Cultural Heritage
- Long term availability of content and its long term accessibility
- Legal issues: Water-Marking, Orphan Works, Copyrights and IPR
- Authentication, Accreditation and Digital Rights Management
- Effective IC-Technologies for the creation, management and reuse of content and knowledge

Visualization, Interpretation and Presentation

- Virtual Museum Applications (e-Museums and e-Exhibitions) and/or Portals of Culture
- Visualisation Techniques (desktop, Virtual and Augmented Reality)
- Reproduction Techniques and Rapid Prototyping in CH
- Game Technologies in Cultural Heritage
- Virtual Reality in Archaeology and Historical Research
- Computer Animation for CH Applications and Virtual Heritage
- Non-Photorealistic Rendering of CH Data
- Digital/Virtual Documentation of Archaeological Excavations
- Novel Internet-based Cultural Heritage Applications
- Usability, Effectiveness and Interface Design for CH Applications
- Innovative Graphics Applications and Techniques
- Interactive Environments and Applications
- e-Libraries and e-Archives in Cultural Heritage
- National Digital Libraries as cross-domain systems
- Storytelling and authoring tools, e-Learning in Cultural Heritage
- Tools for Education, Documentation and Training in CH
- Archaeological Analysis and Interpretive Design
- Professional and Ethical Guidelines
- The Economics of Cultural Informatics and Tourism

## **Submission of Papers:**

Submissions for the joint event are completely electronic, and both the paper and all supplementary material must be submitted through the on-line submission website. The conference accepts only original, unpublished work written in English. We are soliciting three types of contributions:

- **Full research papers** presenting new innovative results. These papers will have a full-length oral presentation and will be published in a high-quality proceedings volume. Each submitted paper must not exceed **8 pages** in total.
- **Project papers** focusing on the description of project organization, use of technology, and lesson learned. These papers will have a short oral presentation and will be included in a "Projects & Short Papers" proceedings volume. Each submitted paper must not exceed **8 pages** in total.
- **Short papers** presenting preliminary ideas and works-in-progress. These papers will have a short oral presentation and will be available as posters in conference breaks. They will be published in the "Projects & Short Papers" proceedings volume. Each submitted paper must not exceed **6 pages** in total.

For information concerning style and format of all submissions, please refer to: <http://www.vsmm2008.org> and then choose Paper Submissions.

## **Important Dates:**

Abstract (full-/project-/short papers):	<del>June 9th, 2008</del>
Paper submission full papers	<del>June 23rd, 2008</del>
<b>Paper submission project/short papers</b>	<b><u>JULY 3<sup>rd</sup>, 2008</u></b>
Notification of Refereeing results	<b>July 31st, 2008</b>
Camera ready FULL papers to printer	<b>August 24th, 2008</b>
Camera ready PROJECT/SHORT papers to printer	<b>August 29th, 2008</b>
Proposals for showcases/ demo's	<del>June 30th, 2008</del>

For more information about the joint conference please visit the webpage <http://www.vsmm2008.org> or directly contact the chair of the event at: [chairman@vsmm2008.org](mailto:chairman@vsmm2008.org).

## **Venue:**

VSM 2008 will be held in Limassol, Cyprus at the renowned Amathus Beach Hotel, a 5-star world class resort and one of *The Leading Hotels of the World*. Special rates for attendees and their families have been arranged and are available on the conference website: [www.vsmm2008.org](http://www.vsmm2008.org).

## Committee:

**Conference Chair:** Marinos Ioannides, Cyprus Higher Technical Institute  
**Program Chairs:** Alonzo Addison, UNESCO WHC and VSMM Society  
Andreas Georgopoulos, National Technical University Athens  
Loukas Kalisperis, Penn State University and The Cyprus Institute

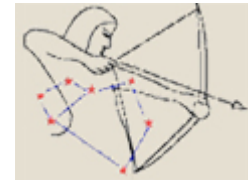
## **International Scientific Committee:**

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