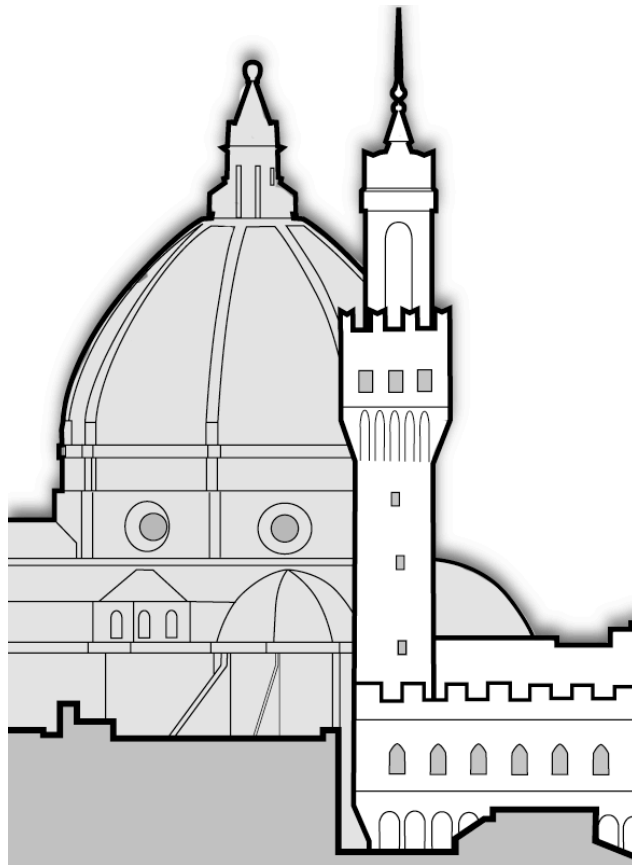


Electronic Imaging & the Visual Arts

EVA 2012 Florence

Proceedings

Editor: Vito Cappellini



Electronic Imaging & the Visual Arts

‘The Foremost European Electronic Imaging Events in the Visual Arts’

EVA 2012 Florence

Conference, Workshops, Meetings & Exhibition

9 – 11 May 2012

Venue: GRAND HOTEL MINERVA
Piazza Santa Maria Novella

Firenze University Press

ISBN

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PROGRAM

Electronic Imaging & the Visual Arts

‘The Foremost European Electronic Imaging Events in the Visual Arts’

Forum for Users, Suppliers & Researchers

The key aim of this Event is to provide a forum for the user, supplier and scientific research communities to meet and exchange experiences, ideas and plans in the wide area of Culture & Technology. Participants receive up to date news on new EC and international arts computing & telecommunications initiatives as well as on Projects in the visual arts field, in archaeology and history. Working Groups and new Projects are promoted. Scientific and technical demonstrations are presented.

Main Topics

- ❖ Synergy with European & International Programmes
- ❖ Mediterranean Initiatives in Technology for Cultural Heritage
- ❖ New Technologies in Conservation & Education to Global Access
- ❖ Digital Image Acquisition and Restoration
- ❖ 3D Developments and Applications in the Cultural Heritage Area
- ❖ Integrated Digital Archives for Cultural Heritage and Contemporary Art
- ❖ Management of Museums by using ICT Technology: Access, Guides, Documentation & Other Services
- ❖ The Impact of New Mobile Communications on Cultural Heritage and Modern Arts Area
- ❖ Semantic Webs
- ❖ Human - Computer Interaction for Cultural Heritage Applications
- ❖ Copyright Protection (Watermarking & Electronic Commerce)
- ❖ Case Studies of Leading Edge Applications: Galleries, Libraries, Education, Archaeological Sites, Museums & Historical Tours
- ❖ Culture and *e-government*
- ❖ Activities and Programmes for *e-learning*
- ❖ Virtual Galleries
- ❖ Cultural Tourism & Travel Applications
- ❖ Art and Medicine

WHO SHOULD ATTEND

THE CULTURAL SECTOR: The Visual Arts Community including Museums, Libraries, Archaeological Sites, Educational Institutions, Commercial Galleries and Dealers, Auction Houses, Artists & Collectors

THE HI-TECH INDUSTRY SECTOR: Multimedia Systems, Image Acquisition & Analysis, Databases, Display & Printing, ICT Industry, Telematics & Systems Manufacturing, On-line Information Services

MEDIA & RELATED SECTORS: Publishing, Press, Film, Television, Photography, Printing, Advertising, Graphics Design, Consumer Media

IMAGING SYSTEMS RESEARCHERS: Imaging Systems, 3-D Acquisition, Reconstruction & Representation, Information Sciences

TOURISM & TRAVEL SECTOR: Tourism Agencies & Operators, Travel Agencies

THE GOVERNMENT SECTOR: Ministries of Culture and other Institutions involved in Cultural Heritage, Ministries of Industry, Education, Research and Science, Regional Governments

SPONSORS & SUPPORTERS INCLUDE:

EUROPEAN COMMISSION, THE UNIVERSITY OF FLORENCE,
REGIONE TOSCANA, PROVINCIA DI FIRENZE, COMUNE DI FIRENZE,
SOPRINTENDENZA PER IL PATRIMONIO STORICO ARTISTICO
ED ETNOANTROPOLOGICO E PER IL POLO MUSEALE DELLA CITTA' DI FIRENZE,
CENTRO PER LA COMUNICAZIONE E L'INTEGRAZIONE DEI MEDIA,
ISTITUTO DI FISICA APPLICATA "NELLO CARRARA",
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ALINARI 24 ORE,
ITALY FILM INVESTMENTS,
T.T. TECNOSISTEMI,
CENTRICA,
NEUMUS,
ICESP,
FONDAZIONE RINASCIMENTO DIGITALE,
UNIVERSITA' INTERNAZIONALE DELL'ARTE,
FONDAZIONE ROMUALDO DEL BIANCO – LIFE BEYOND TOURISM,
ENTE CASSA DI RISPARMIO DI FIRENZE.

Chairman: Vito Cappellini – Faculty of Engineering, Florence University
Co-Chairman: James Hemsley – EVA Conferences International
vito.cappellini@unifi.it, jrhemsley@hotmail.com

EVA 2012 Florence Advisory Committee includes:

Cristina Acidini, Soprintendenza per il Patrimonio Storico, Artistico ed Etnoantropologico e per il Polo Museale della città di Firenze - MiBAC ~
Rossella Caffo, Istituto Centrale per il Catalogo Unico delle Biblioteche Italiane - MiBAC ~
Alberto Del Bimbo, Centro per la Comunicazione e l'Integrazione dei Media - Università di Firenze ~
Paolo Galluzzi, Museo Galileo ~
Andrea De Polo, ALINARI 24 ORE ~
Manami Wada, ManART

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EVA 2012 Florence Technical Organising Committee includes:

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Riccardo Saldarelli, Giuliana Signorini,
Silvia Capecchi, Federica Drovandi,
Paola Imposimato, Laura Mencherini, Donatella Milani, Claudia Riva di Sanseverino



**ENTE
CASSA DI RISPARMIO
DI FIRENZE**

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Web page ~ <http://iapp.det.unifi.it/index.php/english/highlights.en>

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E-mail: info@evaflorence.it Web page ~ <http://www.evaflorence.it/home.php>

PROGRAM

1 - CONFERENCE

Thursday, 10 May: 14,30 – 18,25

Friday, 11 May: 9,00 – 18,30

2 - WORKSHOPS

Thursday, 10 May: 9,15 – 13,30

Friday, 11 May : 9,15 – 13,30

3 - SPECIAL EVENTS

Thursday, 10 May: 18,30 – 20,30

4 - TECHNICAL EXHIBITION

Thursday, 10 May: 10,00 – 18,00

1 - CONFERENCE

Thursday, 10 May

ROOM A

Chairmen: Vito Cappellini, Florence University
James Hemsley, EVA Conferences International

14,15 *Welcome:* Representatives of Sponsors and Supporters

Opening: Cristina Acidini,
Soprintendente per il Patrimonio Storico, Artistico ed
Etnoantropologico e per il Polo Museale della città di Firenze,
Firenze, Italy

15,15 Coffee Break

15,30 **SESSION 1 – STRATEGIC ISSUES**

Chairman: Paolo Blasi, Università di Firenze, Italy

“Excellence Digital Archive Project for Polo
Museale Fiorentino: Exploitation Activities”

Cristina Acidini¹, Vito Cappellini², Takayuki
Morioka³, Marco Cappellini⁴

¹Polo Museale Fiorentino, Italy

²MICC - Università di Firenze, Italy

³DIS Project, Hitachi Ltd., Yokohama, Japan

⁴Centrica, Srl, Firenze, Italy

“Stories and History - Digital Archives
of the Staatliche Museen zu Berlin
(National Museums in Berlin)”

Andreas Bienert
Staatliche Museen zu Berlin - Stiftung Preußischer
Kulturbesitz
Dept. ICT, Berlin, Germany

“Open Low Cost HA Cluster Cloud for
‘Biblioteca Nazionale Centrale di Firenze’”

Cristiano Corsani¹, Giovanni Toraldo²

¹Servizi Informatici – BNCF, Firenze, Italy

²Liberrosoft, Firenze, Italy

ROOM A

16,45 **SESSION 2 – EC PROJECTS AND RELATED NETWORKS & INITIATIVES**
Chairman: Franco Niccolucci, PIN, Prato, Italy

“A Metadata Schema for Cultural Heritage Documentation”

Paola Ronzino¹, Franco Niccolucci²,
Sorin Hermon¹
¹STARC, The Cyprus Institute, Nicosia, Cyprus
²PIN, Prato, Italy

“The ENArC Project Visions and Activities”

Benedetto Benedetti¹, Stella Montanari¹,
Thomas Aigner²,
¹Scuola Normale Superiore di Pisa, Pisa, Italy
²International Center for Archival Research,
Vienna, Austria

“Documenting Abu Simbel:
The 3D-COFORM Approach”

Franco Niccolucci¹, Denis Pitzalis²,
Mike Spearman³
¹PIN, Prato, Italy
²Université Pierre et Marie Curie, Paris, France
³CMC Associates, Edinburgh, UK

“3D-ICONS: European Project Providing
3D Models and Related Digital Content to
Europeana”

A. D'Andrea¹, F. Niccolucci², K. Fernie³
¹Università degli Studi di Napoli L'Orientale,
Napoli, Italy
²PIN, Prato, Italy
³MDR Partners, London, U.K.

“Personalized Access in the Cultural
Heritage Sector”

Andrea De Polo, Francesca Tavanti,
Dept. of R&D Projects, Alinari 24 Ore Spa,
Firenze, Italy

Friday, 11 May

ROOM A

9,00 **INTERNATIONAL FORUM ON “CULTURE & TECHNOLOGY”**
Chairman: Vito Cappellini, Università di Firenze, Italy

The structure of the FORUM is presented.
Actual developments and perspectives are outlined:

- Cooperation Groups
- Proposed Projects
- Funding Opportunities.

Speakers Include:

- Antonia Ida Fontana, Centro UNESCO di Firenze
- Takayuki Morioka, DIS Laboratory – HITACHI Ltd., Yokohama, Japan
- Roberto Ruffino, Fondazione Intercultura Onlus, Colle Val d'Elsa, Siena, Italy
- Marco Aluigi, Fondazione Meeting per l'amicizia

fra i popoli, Rimini, Italy
- Johan Møhlenfeldt Jensen, Picture Archive,
Museum of Copenhagen, Copenhagen, Denmark

11,00 Coffee Break

11.15 **SESSION 3 – 2D - 3D TECHNOLOGIES & APPLICATIONS**

Chairman: Masayuki Tanimoto, Graduate School of Engineering, Nagoya University, Nagoya, Japan

“Collection-Specific and Target - Free Procedure for Color Optimization: Case Study on Monochrome Historical Prints”

U. Dercks¹, D. Keultjes¹, T. Resta²,
G. Trumpy³, G. Vaccaro⁴

¹ Kunsthistorisches Institut in Florenz,
Max-Planck-Institut, Firenze, Italy

² Centrica Srl, Firenze, Italy

³ Imaging & Media Lab, University of Basel,
Switzerland

⁴ Università degli Studi di Firenze, Italy

“Materials on the History of Old Russian Art are in Learning and Research at the University”

T. Laska, E. Gaevskaya
Faculty of Arts, Saint Petersburg State University,
Saint Petersburg, Russia

“From Restoration to Management - A Sustainable Methodology for Castles, Towers and Medieval Churches”

Renata Salvarani
Università Europea di Roma, Roma, Italy

“Non-destructive Examination of Panel Painting Structures by Terahertz Waves”

K. Fukunaga¹, M. Picollo²

¹Electromagnetic Research Centre, National Institute of Information and Communications Technology, Tokyo, Japan

²Istituto di Fisica Applicata "Nello Carrara", Consiglio Nazionale delle Ricerche, Firenze, Italy.

“2D Art Painting to Stereoscopic 3D Conversion Using Semi-Automatic Depth Map Generation”

Raymond Phan, Richard Rzeszutek,
Dimitrios Androutsos
Department of Electrical and Computer Engineering,
Ryerson University,
Toronto, Ontario, Canada

“3D Spatial Reproduction by FTV”

Masayuki Tanimoto
Graduate School of Engineering, Nagoya,
University, Nagoya, Japan

13,15 Lunch Break

ROOM A

14,30 **SESSION 4 – VIRTUAL GALLERIES – MUSEUMS AND RELATED INITIATIVES**

Chairman: Andreas Bienert, Staatliche Museen zu Berlin, Berlin, Germany

“National Systems on Digital Cultural Heritage in the Frame of European Initiatives”

Rossella Caffo
Istituto Centrale per il Catalogo Unico delle Biblioteche Italiane – Ministero per i Beni e le Attività Culturali, Rome, Italy

“The Interactive User. Modern User Generated Vernacular Photo and the Picture Archive.

Johan Møhlenfeldt Jensen
Picture Archive, Museum of Copenhagen, Copenhagen, Denmark

“Between Reuse and Enhancing: The Archeological Museum of Santa Scolastica, Bari”

Isabella Lapi Ballerini
Apulian Regional Direction of Cultural Heritage and Landscape, Bari, Italy

“Education or Edutainment?”

Elena Gaevskaya
Faculty of Arts,
Saint Petersburg State University,
Saint Petersburg, Russia,

“Networked Museum: Our Vision and Experience”

Shinji Shimojo¹ Masaki Chikama²,
Kaori Fukunaga², Rieko Kadobayashi³
¹Cybermedia Center, Osaka University
Ibaraki, Japan
²National Institute for Information and Communications Technology Keihanna/Koganei, Japan
³Osaka Electro-Communication University, Shijonawate, Japan

“Musint Project: Towards a Digital Interactive Archaeological Museum”

A.M. Jasink¹, L. Bombardieri¹, G. Dionisio¹,
G. Tucci², D. Cini², W. Nunziati³,
¹Department of Antiquity, Middle Ages and Renaissance Sciences and Linguistics, University of Florence, Italy
²GeCo, Geomatics for Conservation & Communication of Cultural Heritage Laboratory, DiCR, University of Florence, Italy
³Magenta Software Lab., Florence, Italy,

16,30 Coffee Break

ROOM B

16,45 SESSION 5 – ACCESS TO THE CULTURE INFORMATION

Chairmen: James Hemsley, EVA Conferences International, UK and

“The Intelligent Museum Fuition of Works of Art by All”

Pier Luigi Emiliani
Institute of Applied Physics “Nello Carrara”,
National Research Council,
Firenze, Italy

“Search Services for Cultural Institutions Using Google Technologies. A Collaboration between Itaca-M and Museo Galileo”

Marco Berni, Fabrizio Butini, Elena Fani
Museo Galileo - Institute and Museum of the
History of Science, Firenze, Italy

“SMARTCITY: Customized and Dynamic Multimedia Content Production for Tourism Applications”

F. Spadoni¹, A. Tatarelli¹, L. Loparco¹,
R. Rossi¹, F. Tariffi², E. Sassolini³, P. Ongaro⁴,
¹Rigel Engineering Srl, Livorno, Italy
²Space SpA, Prato, Italy
³ILC – C.N.R., Pisa, Italy
⁴Meta Srl, Lucca, Italy

“Cultural Tourism & Travel Applications”

Giovanni Gasbarrone
Top Clients and Public Sector
Marketing - Offerta Turismo,
Telecom Italia,
Roma, Italy

“The Senarum Vinea Project Wine Tourism and Mobile Multimedia Devices”

G. Benelli, A. Pozzebon
Dipartimento di Ingegneria dell’Informazione,
Facoltà di Ingegneria, Università di Siena,
Siena, Italy

“Preliminary Results on Priming Based Tools to Enhance Learning in Museums of Fine Arts”

Annalisa Banzi¹, Raffaella Folgieri²
¹Istituto di Comunicazione,
Comportamento e Consumi “Giampaolo Fabris”,
Università IULM, Milano, Italy
²Dipartimento di Scienze Economiche,
Aziendali e Statistiche,
Università degli Studi di Milano, Milano, Italy

2 - WORKSHOPS

Thursday, 10 May

ROOM A

WORKSHOP 1 INNOVATION AND ENTERPRISE – INNOVAZIONE E IMPRESA

(Italian Language)

9,00 – 13,00

*Chairman: Francesco Chirichigno, Consigliere dell'Organo di
Vigilanza per la Parità di Accesso alla Rete TELECOM TALIA*

*Opening: Marco Bellandi, Pro-Rettore al Trasferimento Tecnologico,
Università degli Studi di Firenze*

*Invited Speakers: Enrico Bocci, Responsabile Commissione Regionale Servizi
Innovativi e Tecnologici, Confindustria Toscana
Laura Castellani, Regione Toscana*

Technological requirements in the Cultural Heritage field are outlined and opportunities for Italian SME's working in the field, using new technologies, are presented.

Regional and national applied research Programs in Italy are described.

Activities by National Organizations and Firms working in the area of Telecommunications, Informatics, Optoelectronics, Environment and Infomobility are presented.

Funding by European Commission is considered, with particular reference to multimedia and telematics for Cultural Heritage, Environment and Education (*e-learning*). Initiatives regarding the "know-how" transfer from Research Organizations to the Industrial Sector are described.

Organizations and Companies present their activities and experiences.

Speakers include:

- *Claudio Tasselli, Sezione Servizi Innovativi e Tecnologici, Confindustria, Firenze*
- *Antonella Castaldi, Gruppo SESA, Empoli*
- *Riccardo Bruschi, T.T. Tecnosistemi, Prato*
- *Andrea Calistri, SAPAF Srl, Firenze*
- *Alberto Pecci, Pecci & C. Spa, Firenze*
- *Stefano Fasana, DOMINA Srl, Biella*
- *Franco Guidi, NEUMUS, Firenze*
- *Fosco Ferri, FIT TOSCANA*
- *Claudia Del Re, Studio Legale Del Re-Sandrucci, Firenze*
- *Roberto Borri, CSP Innovazione nelle ICT, Torino*

ROOM B

WORKSHOP 2 INTERNATIONAL COOPERATION

9,00 – 13,00

Chairman: Ugo Di Tullio, CEO ITALY FILM INVESTMENTS, Rome, Italy

The general aspects of international cooperation in Cultural Heritage are presented. The impact of new technologies in the field is considered, outlining the more suitable ones for cooperative plans.

The importance of Virtual Heritage for better cooperation among the Nations in the World is considered.

Projects currently developed in different parts of the World are presented.

The importance of coordination and promotion by International Organization (as by UNESCO) is outlined.

European Commission programmes and initiatives are presented. Collaborative activities in Mediterranean Area are in particular described.

Speakers include:

- *Maria Luisa Stringa, Centro UNESCO di Firenze, Italy*
- *Paolo Del Bianco, Fondazione Romualdo Del Bianco - Life Beyond Tourism, Firenze, Italy*
- *Aurelia Moser, Pratt Institute, Brooklyn, NY, USA*
- *Romana Krizova, Accord International s.r.o., Praha, Czech Republic*
- *Hiroku Kudo, Faculty of Law, Chuo University, Tokyo, University*
- *Sanja Halling, Swedish National Coordinator of Digitization, Swedish National Archives, Sweden*
- *Salvatore Siano, Istituto Fisica Applicata "Nello Carrara", Firenze, Italy*

Friday, 11 May

ROOM B

WORKSHOP 3 EUROPEANA AWARENESS: INITIATIVES AND PROJECTS OF THE CENTRAL INSTITUTE FOR THE UNION CATALOGUE OF THE ITALIAN LIBRARIES

10,30-13,00

Chairman: Rossella Caffo, Director ICCU

Workshop organised by the Central Institute for the Union Catalogue of the Italian libraries (ICCU).

The workshop aims at raising awareness on Europeana, the European culture portal, and the related strategies on digital heritage of the European Commission.

The workshop will introduce at first the results of the **Europeana Awareness event** held on May, 9th in Brussels where the culture ministers of the European Union illustrated their participation in Europeana and discussed upon online cultural heritage as a driver of creativity and digital innovation.

The "Europeana Workshop" held on the occasion of EVA Florence will illustrate the role that ICCU plays for the promotion and increase of Europeana. In fact ICCU is involved since many years, both as coordinator and partner, in some of the projects of the Europeana Group: currently they are Europeana Awareness, LINKED HERITAGE, Europeana 14-18, Partage Plus, EuropeanaPhotography, and ARROW+.

Europeana Awareness is a network of best practices coordinated by the Europeana Foundation, which involves 48 partners including the ICCU. The project objectives are to promote Europeana to users, policy makers, politicians and cultural organizations in each Member State; encourage institutions to supply the portal with content and promote cultural awareness of the economic potential of cultural heritage.

Linked Heritage was launched in April 2011 under the coordination of MiBAC to supply Europeana with over 3 million data, explore the use of Linked Data within the European portal, improve the semantic search through the use of multilingual terminologies, and involve the private sector into Europeana. It follows the steps of the previous successful project ATHENA.

Europeana 14-18 is a digitisation project aiming at feeding Europeana with documents relating to the First World War provided by a network of cultural institutions, including ICCU, coordinated by the Staatsbibliothek zu Berlin (Germany).

Partage Plus is a project led by Collection Trusts (United Kingdom) for the coordination of the digitisation activities of 25 partners, including ICCU, on the theme of Art Nouveau.

Europeana Photography is a project coordinated by Alinari 24 ORE (Italy) Spa for the provision to Europeana of digital cultural objects relating to ancient photography. ICCU participates as leader of the dissemination activities and in representation of the historical photography fund of the archive of the Italian Geographical Society.

ARROW+ is the follow up of ARROW, the network of European national libraries, publishers and collective management organisations which worked to help make digital content in Europe more accessible, usable and exploitable. ARROW, under the coordination of AIE (Italy) developed a distributed infrastructure for the management of copyright that allows libraries and institutions involved in digitization projects, to determine if a work is protected by copyright, or is in the public domain, locate the rights holders, and identify orphan works.

3 - SPECIAL EVENTS

Thursday, 10 May 18,30

*RECEPTION at “Palagio di Parte Guelfa”
in cooperation with COMUNE DI FIRENZE (MUNICIPALITY OF FLORENCE)
Palazzo di Parte Guelfa, 1 - Firenze*

Concert by Gabriele Spina and Beatrice Bartoli

4 - TECHNICAL EXHIBITION

Thursday, 10 May: 10,00 – 18,00

at Palazzo di Parte Guelfa
Piazza di Parte Guelfa, 1 – Firenze

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