# Carlo Meghini

## Curriculum Vitae

March 2015

## 1 Biographic Data

Name: Carlo Meghini

Date and Place of Birth: March 2, 1956, Macerata

Address: Via Alberto Mario 21, I-56125 Pisa, IT.

Office Address: Consiglio Nazionale delle Ricerche, Istituto di Scienza e Tecnologie dell'Informazione

"A.Faedo", Via G. Moruzzi 1, Località S. Cataldo, I-56124 Pisa, IT.

**Phone:** +39 050 6212893 (off), +39 348 3972164 (mob).

Email: carlo.meghini@cnr.it

Home Page: http://nmis.isti.cnr.it/meghini/

## 2 Language skills

Italian: native speaker

English: excellent command / highly proficient in spoken and written English

## 3 Qualifications

October 1969 - July 1974 High School Degree: Liceo Scientifico Galileo Galileo in Macerata.

October 1974 - April 1979 Laurea cum laude in Scienze dell'Informazione, University of Pisa.

March 1978—December 1979 Selenia Scholarship, to do a research thesis at the Computer Science Institute of the University of Pisa under the supervision of Prof. Fabrizio Luccio, and for the following eight months, to continue the research work.

**January 1980–November 1980** IBM Scholarship at the Department of Mathematics of the University of Pisa under the supervision of Prof. Franco Giannessi to do research and experimentation on mathematical programming.

Juanuary 1981—December 1981 Italsiel Scholarship to do research under the supervision of Ing. Costantino Thanos at the *Istituto di Elaborazione della Informazione* of the *Consiglio Nazionale delle Ricerche*, in the context of the National Italian Project in Informatics (*Progetto Finalizzato Informatica*).

28 December 1983 He has won a National competition (n. 307.6.24) for the position of Collaboratore Tecnico Professionale at the *Istituto di Elaborazione della Informazione* of the *Consiglio Nazionale delle Ricerche*, which was the initial position of researchers.

- 8 June 1984 He has won a National competition (n. 203.2.16) for a scholarship of the *Consiglio Nazionale delle Ricerche* abroad.
- September 1984 April 1985 Visitor Researcher in the Artificial Intelligence group of the Department of Computer Science, University of Toronto, under the supervision of Prof. John Mylopoulos.
- May 1985 December 1985 Visitor Researcher supported by the University of Toronto, in the Artificial Intelligence group, Department of Computer Science, University of Toronto, under the supervision of Prof. John Mylopoulos.
- 20 December 2001 He has won a National competition (n. 310.2.91) for the position of Prime Researcher (*Primo Ricercatore*) at the *Istituto di Scienza e Tecnologie dell'Informazione* of the *Consiglio Nazionale delle Ricerche*, which is his current position.
- 24 February 2007–17 March 2007 Visiting Professor at the Meme media Laboratory of the University of Hokkaido, Sapporo, Japan.
- 8 September 2008–11 October 2008 Invited Researcher at the Laboratoire de Recherche Informatique of the University of Paris South, Paris, France.
- 1 June 2009–31 August 2009 Invited Professor (*Einsegnant invité*) for three months at the University of Paris South, Paris, France.
- **5 August 2011** He has been evaluated as eligible (*Idoneo*) as a Director of Research (*Dirigente di Ricerca*) at the National competition (n. 364.86) of the *Consiglio Nazionale delle Ricerche*.

## 4 Employment

- from July 1, 2008 Responsible of the Digital Library research group within the Networked Multimedia Information System laboratory of the *Istituto di Scienza e Tecnologie dell'Informazione* of *Consiglio Nazionale delle Ricerche*. The research group carries out research and development in the field of Digital Libraries and currently includes eight people besides Carlo Meghini: two permanent researchers, one post-doc, one PhD student, three technologists and one administrative person. More information on: http://nemis.isti.cnr.it/groups/digital-libraries
- **December 28, 2001** Prime Researcher at *Istituto di Scienza e Tecnologie dell'Informazione* of *Consiglio Nazionale delle Ricerche*.
- January 1, 1999 December 27, 2001 Researcher detached at the company Spazio ReD, Pisa.
- February 1, 1984 December 31, 1998 Researcher at the Istituto di Elaborazione dell'Informazione (to become later Istituto di Scienza e Tecnologie dell'Informazione) of Consiglio Nazionale delle Ricerche.

### 5 Awards

- 2015 DanteSources http://perunaenciclopediadantescadigitale.eu/dantesources/ DH Awards: Winner Best DH tools or suite of tools http://dhawards.org/dhawards2015/results
- **August 2003** CIA-2003, the Seventh International Workshop on Cooperative Information Agents Intelligent Agents for the Internet and Web. Best paper award.

## 6 Scientific Research Summary and Major Achievements

Throughout his career, Carlo Meghini has carried out research in the area of information systems, starting with databases, then moving on to multimedia information retrieval, and finally to digital libraries. He has worked on the theoretical aspects of information modelling of these three fields, using mathematical logic as a modelling language and computational complexity as an evaluation tool. In more than thirty years of research, he has published more than ninety papers in international scientific conferences and journals. Sub-section 6.1 gives a very condensed summary of this large body of work, highlighting the major achievements.

Parallel to this theoretical stream of work, he has carried out an applied stream of work, aimed at transfering the results of research into prototypical information systems, used in various application fields. This applied activity has been carried out in the context of projects, mostly international, funded by the European Commission. As his career progressed, he has moved towards leading roles in these projects, culminated in the Coordination of PRELIDA, an FP7 Coordination Action on the preservation of Linked Data ended in 2014. Sub-section 6.2 gives the list of projects in which he has been involved, providing only general information about each project.

#### 6.1 Research

Carlo Meghini started his research career working on theoretical aspects of databases in the area of query processing and concurrency control. His major achievements in this field are:

- the computational classification of a query processing problem in distributed relational databases (30). In particular, he has shown that query process becomes intractable if the fragmentation of relations allows overlapping of data between fragments.
- An optimal predicate locking scheduler (28), offering a higher throughput than 2-phase locking and computational tractability for managing concurrent access to sets of data denoted by a class of conjunctive predicates.

He then moved to multimedia information retrieval, studying logic-based models for the representation of the structure and contents of multimedia documents including text and images, and for the retrieval of these documents based on both the content- and the semantic-level features. His major achievements in this field are multimedia information retrieval models presented at the ACM SIGIR Conference (93,90,86), culminated on a model published on the Journal of the ACM (26), from which an entry in the Encyclopedia of Information System has been derived (12).

After spending three years in the industries for technology transfer, he has worked in the field of Digital Libraries, both on theoretical and practical aspects, in strict collaboration with Prof. Spyratos at the University of Paris South. His major achievements in this field are:

- At the theoretical level, his studies on the modelling of collections by means of Formal Concept Analysis (58,63,22) which led to a collaboration with the University of Illinois (19). He has also investigated the formal aspects of modelling the information content of a digital library, proposing models grounded in mathematical logic (21) and also addressing the implementation of those models by means of the semantic web languages (18).
- At a more applied level, he has had a central role in the making of Europeana, the European Digital Library, connecting Europeana to the scientific area of information systems. In this context, he has contributed the Europeana Data Model (EDM) (45) up to version 5.2.3, whose specification he authored. The specification of the EDM is a technical document produced within the Europeana v2.0 project and currently maintained by the Europeana Foundation; it has had 7387 downloads<sup>1</sup>

 $<sup>^{1}</sup>$ as of February 26, 2015

and is used for structuring more than 30 millions objects held in the Europeana database, the largest metadata collection in the Cultural Heritage Domain. He has also been the director of the EuropeanaLabs, the research and development infrastructure of Europeana, hosted at ISTI.

## 6.2 Projects

## 6.2.1 European Projects

He has been the scientific responsible for CNR in the following European projects:

#### VRE4EIC

Project title A Europe-wide Interoperable Virtual Research Environment to Empower Multidisciplinary Research Communities and Accelerate Innovation and Collaboration

Project type Research and Innovation Action

*Program* Horizon 2020, Excellent Science, EINFRA-9-2015:e-Infrastructures for virtual research environments (VRE)

Grant Agreement n. 676247

Period October 1, 2015 - September 30, 2018

CNR Funding 507,500 Euros

Role Scientific Responsible for ISTI, Work Package Leader

#### **Parthenos**

Project title Pooling Activities, Resources and Tools for Heritage E-research Networking, Optimization and Synergies

Project type Research and Innovation Actions

 $\label{eq:control_program} Program \ \ \text{Horizon 2020, Excellent Science, INFRADEV-4-2014-2015, Developing new world-class research infrastructures}$ 

Grant Agreement n. 654119

Period May 1, 2015 - April 30, 2019

CNR Funding 1,351,500 Euros

Role Scientific Responsible for ISTI, Work Package Leader

#### **PRELIDA**

Project title Preserving Linked Data

Project type Coordination and Support Action

Program FP7-ICT-2011-9 ICT-2011.4.3: Digital Preservation

Grant Agreement n. 600663

Period January 1, 2013 – December 31, 2014

CNR Funding 159,255 Euros

Role Scientific Responsible for ISTI, Project Coordinator

#### Presto4U

Project title European Technology for Digital Audiovisual Media Preservation

Project type Coordination and Support Action

Program FP7-ICT-2011-9 ICT-2011.4.3: Digital Preservation

Grant Agreement n. 600845

Period January 1, 2013 - December 31, 2014

CNR Funding 105,074 Euros

Role Scientific Responsible for ISTI, Task Leader

#### eCloud

Project title Europeana Cloud: Unlocking Europes Research via The Cloud

Project type CIP-Best Practice Network

Program CIP-ICT-PSP-2012-6

 $Grant\ Agreement\ n.\ 325091$ 

Period February 1, 2013 - January 31, 2016

CNR Funding 162,600 Euros

Role Scientific Responsible for ISTI, Task Leader

#### Europeana v. 3.0

Project title Europeana v3.0

Project type CIP-Best Practice Network

Program CIP-ICT-PSP-2013-7

Grant Agreement n. 620484

Period June 1, 2014 - May 31, 2015

CNR Funding 76,826 Euros

Role Scientific Responsible for ISTI, Task Leader

#### Europeana v. 2.0

Project title Europeana v2.0

Project type CIP-Best Practice Network

Program CIP-ICT-PSP-2010-4

Grant Agreement n. 270902

Period October 1, 2011 - February 28, 2014

CNR Funding 199,020 Euros

Role Scientific Responsible for ISTI, Task Leader

#### Europeana version 1.0

Project title Europeana version 1.0

Project type ECP Thematic Network

Program ECP-2008 eContentPlus

Grant Agreement n. 558001

Period July 1, 2009 - October 31, 2011

CNR Funding 82,000 Euros

Role Scientific Responsible for ISTI, Work Package co-Leader, Director of the EuropeanaLabs

#### ASSETS

Project title Advanced Search Services and Enhanced Technological Solutions for the European Digital Library

Project type CIP-Best Practice Network

Program CIP-ICT-PSP-2010-4

Grant Agreement n. 250527

Period April 1, 2010 – September 30, 2012

CNR Funding 513,255 Euros

Role Scientific Responsible for ISTI, Stream Leader.

#### **EDLnet**

Project title European Digital Library Network

Project type econtentplus Thematic Network

Program ECP-2006-DILI-520001

Grant Agreement n. 52001

Period July 1, 2007 – June 30, 2009

CNR Funding

Role Technical Director of Working Group 2.3 Technical Architecture.

#### **CASPAR**

Project title Cultural, Artistic and Scientific knowledge for Preservation, Access and Retrieval

Project type Integrated Project

Program 6th Framework Programme

Grant Agreement n. 033572

Period April 1, 2006 - November 30, 2009

CNR Funding 592,756 Euros

Role Scientific Responsible for ISTI, Stream Director, member of the Excecutive Project Management.

#### **BRICKS**

Project title Building Resources for Integrated Cultural Knowledge Services

Project type Integrated Project

Program 6th Framework Programme

Grant Agreement n. 507457

Period January 1, 2004 - June 30, 2007

CNR Funding 506,817 Euros

Role Scientific Responsible for ISTI, Work Package Leader

He has had leading roles in the following European projects:

#### Ariadne

Project title Advanced Research Infrastructure for Archaeological Dataset Networking in Europe

Project type Combination of Collaborative Project and Coordination and Support Action

*Program* FP7-INFRASTRUCTURES-2012-1 INFRA-2012-1.1.3.: Research infrastructures for archaeological datasets and related technologies

Grant Agreement n. 313193

Period February 1, 2013 – January 31, 2017

CNR Funding 382,103 Euros

Role Work Package Leader

#### **DELOS**

Project title DELOS: Network of Excellence in Digital Libraries

Project type Network Of Excellence

Program 6FP Framework Programme

Grant Agreement n. 507618

Period January 1, 2004 – December 31, 2007

CNR Funding 689,000 Euros

Role Task Leader

#### **FERMI**

Project title Formalization and Experimentation in the Retrieval of Multimedia Information

Project type Basic Research Action

Program ESPRIT III Framework Program

Grant Agreement n. 8134

Period March 1, 1994 - May 31, 1997

 $CNR \ Funding \ 276,000,000 \ Lire$ 

Role Work Package Leader, Management Committee member

#### **MIRO**

Project title Multimedia Information Retrieval

Project type Basic Research Working Group

Program ESPRIT

Grant Agreement n. 6576

Period October 1, 1992 – September 30, 1995

CNR Funding 120,000,000 Lire Role Task Coordinator, Steering Committee member

#### **TODOS**

Project title Tools for Designing Office Systems
Project type Collaborative Project
Program ESPRIT I Framework Program
Grant Agreement n. 813
Period January 1, 1986 – December 31, 1988
CNR Funding 250,000,000 Lire
Role Work Package Leader

He has collaborated to the following European projects:

## DL.org

Project title Digital Library Interoperability, Best Practices and Modelling Foundations Project type Coordination Action
Program 7th Framework Programme
Grant Agreement n. 231551
Period December 1, 2008 – February 28, 2011

#### **FIDE**

Project title Formally Integrated Data Environment Project type Basic Research Action Program ESPRIT II Framework Program Grant Agreement n. 3070 Period July 1, 1989 – June 30, 1992

#### **MULTOS**

Project title Multimedia Office System
Project type Collaborative Project
Program ESPRIT I Framework Program
Grant Agreement n. 28
Period February 1, 1985 – February 1, 1990

#### 6.2.2 National Projects

#### Per una Enciclopedia dantesca digitale

Project title Per una Enciclopedia dantesca digitale
Project type PROGRAMMI DI RICERCA SCIENTIFICA DI RILEVANTE INTERESSE NAZIONALE
Period January 1, 2012 – December 31, 2015
CNR Funding 138,716 Euros
Role Scientific Responsible for ISTI

### Piattaforma ICT per servizi intelligenti, adattivi e partecipativi per lefficienza energetica

Project title Energia da Fonti Rinnovabili e ICT per la Sostenibilita Energetica Period January 1, 2013 – December 31, 2015 CNR Funding 700,000 Euros Role Work Package Leader

## RIS

Project title Ricerca e Innovazione in ambito Socio sanitario Project type Regione Toscana, POR CReO 2007 - 2013 LINEA DI INTERVENTO 1.5.a - 1.6 BANDO UNICO R&S ANNO 2012 Period April 2, 2012 – April 1, 2014 CNR Funding 181,665 Euros Role Scientific co-Responsible for ISTI

## 7 Committees and Boards

- From June 1, 2014 Responsible of the Project Area on "Data, Content and Media" of the CNR Department Ingegneria, ICT e Tecnologie per l'Energia e i Trasporti (Engineering, ICT and Technologies for Energy and Transports.) The Project Area covers the research themes included in the "Content technologies and information management" section of the "LEIT Information and Communication Technologies" Programme in the European Commission initiative Horizon 2020. At present, it includes research groups from 13 CNR institutes, 24 European projects for a total CNR funding of more than 8 million Euros.
- December 11, 2008 October 30, 2015 Elected member of the Scientific Board Board (Consiglio d'Istituto) of Istituto di Scienza e Tecnologie dell'Informazione of CNR. The Scientific Board of the Institute includes the Director of the Institute and six elected members, meets on average once a month, and its task is to monitor the research and development activities of the Institute and advise the Director on the scientifical and technical management of the Institute.
- January 20, 2010 June, 2014 Appointed by the Board (*Consiglio di Amministrazione*) of CNR as Responsible of the National Project "Data Mining, Ontologie e Semantic Web" of the CNR Department on Information and Telecommunications Technologies.
- July 1997 June 2002 Elected member of the Scientific Board (*Consiglio Scientifico*) of the Istituto di Elaborazione dell'Informazione, where he was working as a researcher.

### 8 Professional activities

## 8.1 Chairing Conferences and Scientific Management

- 1. FoIKS 2014, Eighth International Symposium on Foundations of Information and Knowledge Systems, March 3–7, 2014, Bordeaux, France. Conference co-chair.
- 2. ISIP 2012, International Workshop on Information Search, Integration and Personalization, October 11–13, 2012, Sapporo, Japan. Programme Committee co-chair.
- 3. Metadata and Semantics Research Conference, MTSR 2012, track on Metadata & Semantics for Cultural Collections & Applications, Track co-chair.
- 4. ACM SIGDOC 2011, the 29th International Conference on Design of Communication, October 3–5, 2011, Tirrenia, Pisa. Programme co-chair.
- 5. IRCDL 2011, 7th Italian Research Conference on Digital Libraries, January 10-12, 2011, Pisa, Italy. Programme co-chair.
- 6. TPDL 2011, International Conference on Theory and Practice of Digital Libraries, September 26–28, 2011, Berlin, Germany. Program co-chair.
- 7. ECDL 2007, the 11th European Conference on Research and Advanced Technologies for Digital Libraries, Programme co-chair and PC member.

- 8. International Workshop on Peer-to-Peer Computing & DataBases, held in conjunction with EDBT 2004, the 9th International conference on Extending Database Technology, Workshop and Program Committee co-Chair.
- 9. Fourth DELOS Workshop on Image Indexing and Retrieval, August 28–30, 1997, Pisa. Workshop chair.
- 10. International Workshop on Conceptual Modelling for Multimedia Information Seeking, held in conjunction with ER'97, The 16th International Conference on Conceptual Modeling, Los Angeles, California, November 3–6, 1997. Workshop co-chair.
- 11. ERCIM Workshop on *Theoretical and Experimental Aspects of Knowledge Representation*, May 21-22, 1992, Pisa. Workshop co-chair.

## 8.2 Membership in Conference Programme Committees

He has been a member of the Programme Committee of the following international conferences:

- DL2014, A single event that brings together the International Conference on Theory and Practice of Digital Libraries and the Joint Conference on Digital Libraries 2014, 8-12 September 2014, London, UK.
- 2. ICCS 2014, 21st International Conference on Conceptual Structures, 27-30 July 2014, Iasi (Romania).
- 3. IRCDL 2014, the 10th Italian Research Conference on Digital Libraries, 30-31 January 2014, Padoa.
- 4. Metadata and Semantics Research Conference MTSR 2014, 27-29 November 2014, Karlsruhe, Germania.
- 5. 20th International Conference on Conceptual Structures ICCS 2013, Homi Bhabha Centre for Science Education (TIFR), January 10-12, 2013, Mumbai, India.
- 6. 9th Italian Research Conference on Digital Libraries IRCDL 2013, 31 January 1 February 2013, La Sapienza, Roma.
- 7. International Workshop Formal Concept Analysis meets Information Retrieval FCAIR 2013, March 24, 2013, Higher School of Economics, Moscow, Russia, co-located with The 35th European Conference on Information Retrieval.
- 8. 10th International Conference on Preservation of Digital Objects iPRES 2013, 2-6 September 2013, Lisbon, Portugal.
- 9. 3rd International Conference on Theory and Practice of Digital Libraries TPDL 2013, 22-26 September 2013, Valletta, Malta.
- Metadata and Semantics Research Conference MTSR 2013, 19-22 November 2013, Thessaloniki, Greece.
- 7th International Symposium on Foundations of Information and Knowledge Systems FoIKS 2012, March 5-9, 2012, Kiel, Germany
- 12. *iPRES 2012: the Ninth International Conference on Preservation of Digital Objects*, October 1-5, 2012, Toronto, Ontoario, CA.
- 13. 8th Italian Research Conference on Digital Libraries, IRCDL 2012, February 9-10, 2012, Bari, Italy.

- 14. 4th International Conference on Management of Emergent Digital EcoSystems MEDES 2012, October 28–31, 2012, Addis Ababa, Ethiopia.
- 15. 2nd International Conference on Theory and Practice of Digital Libraries, TPDL 2012, 23-27 September 2012, Paphos, Cyprus.
- 16. ESWC 2011, the 8th Extended Semantic Web Conference, May 29 June 2, 2011, Creta, Digital Libraries Special Track.
- 17. 8th International Conference on Preservation of Digital Objects, iPRES 2011, November 1–4, 2011, Singapore.
- 18. The Sixth International Symposium on Foundations of Information and Knowledge Systems (FoIKS 2010), Sofia, Bulgaria, February 15 19, 2010.
- PersDB 2010, 4th International Workshop on Personalized Access, Profile Management, and Context Awareness in Databases, PersDB 2010, held in conjunction with VLDB 2010, 36th International Conference on Very Large Data Bases, Singapore, 13 to 17 Sept 2010.
- 20. 7th International Conference on Preservation of Digital Objects, iPRES 2010, , Vienna, Austria, September 19 24, 2010.
- The 14th European Conference on Research and Advanced Technology for Digital Libraries, ECDL 2010, Glasgow, U.K., Sept. 6-10, 2010.
- 22. The 21th the International Conference on Database and Expert Systems Applications, DEXA 2010, Bilbao, Spain, 30 August 3 September 2010.
- 23. 20th DEXA conference, the International Conference on Database and Expert Systems Applications, Linz, Austria 31 August 4 September 2009.
- 24. The international ACM conference on Management of Emergent Digital EcoSystems (MEDES'09) Lyon, France from October 27th to 30th 2009.
- 25. 10th International Conference on Web Information System Engineering, WISE 2009, Poznen, Poland, October 5-7, 2009.
- 26. ECDL 2008, the 12th European Conference on Research and Advanced Technologies for Digital Libraries, Aarhus, Denmark, 14-19 September 2008.
- 27. PersDB 2008, 1st International Workshop on: Personalized Access, Profile Management, and Context Awareness in Databases, held in conjunction with VLDB08, Auckland, New Zealand, 23–28 August 2008.
- 28. 9th International Conference on Web Information System Engineering, WISE 2008, Auckland, New Zealand, September 1-3, 2008.
- 29. FoIKS 2008, the Fifth International Symposium on Foundations of Information and Knowledge Systems, Pisa, Italy, February 11-15, 2008.
- 30. SDKB 2008, the 3rd International Workshop on Semantics in Data and Knowledge Bases, colocated with EDBT 2008, 11th International Conference on Extending Database Technology, March 29, 2008, Nantes, France.
- 31. Databases and Data Mining track of AICCSA-08, the 6th ACS/IEEE International Conference on Computer Systems and Applications, April 1-4, 2008, Doha, Qatar.
- 32. First Workshop on Semantic Interoperability in the European Digital Library, to be held as part of the 5th European Semantic Web Conference, 2nd June Tenerife, Spain.

- 33. International Workshop on Digital Libraries Foundations, held in conjunction with JCDL 2007, the ACM IEEE Joint Conference on Digital Libraries, Vancouver, BC, Canada, June 17-23, 2007.
- 34. PersDL 2007, 10th DELOS Thematic Workshop on Personalized Access, Profile Management, and Context Awareness in Digital Libraries, held in conjunction with the UM 2007 Conference, Corfu, Greece, 29th and 30th June 2007.
- 35. Second Workshop on Foundations of Digital Libraries, held in conjunction with ECDL 2007, the 11th European Conference on Research and Advanced Technologies for Digital Libraries, Budapest, Hungary, September 16–21, 2007.
- 36. 8th International Conference on Web Information System Engineering, WISE 2007, 3-6th December, 2007, Nancy, France.
- 37. 7th International Conference on Web Information System Engineering, WISE 2006, Wuhan, China, October 23-26, 2006.
- 38. 6th International Conference on Web Information System Engineering, WISE 2005, New York City, NY, USA, 20-22 November 2005.
- 39. Third International Conference on Visual Information and Information Systems, VISUAL'99, Amsterdam, The Netherlands, June 2–4, 1999.
- 40. Artificial Intelligence in Digital Libraries Workshop, held in conjunction with the International Joint Conference on Artificial Intelligence, Nagoya, Japan, 23–29 August 1997.
- 41. CAiSE 1998, Conference on Advanced information Systems Engineering, Pisa, Italy, June 8–12, 1998.

## 8.3 Reviewing for Scientific Journals

He has been a referee for the following journals, among others:

- ACM Journal on Computing and Cultural Heritage
- ACM Transactions on Information Systems
- Information Systems
- Information Retrieval
- The journal of Intelligent Information Systems.

## 8.4 Reviewing of Projects funded by the European Commission

He has been reviewer of the European Project "ENSURE - Enabling kNowledge Sustainability Usability and Recovery for Economic value" (grant. n. 270000), an FP7 Integrated Project on Digital Preservation, started on beginning of February 2011 and lasted until end of January 2014, with a Consortium of 13 members and a total funding of 7.85MEuros. He has carried out four reviews to the project:

- pre-review, held in Brussels on 22 September 2011, done by Carlo Meghini alone.
- 1st review, held in Bruxelles on 14 and 15 March 2012, done with two other reviewers. Carlo Meghini was selected as Rapporteur.

- 2nd review, held in Berlin on 20 and 21 March 2013, done with two other reviewers. Carlo Meghini
  was selected as Rapporteur.
- 3rd and final review, held in Porto on 19 and 20 March 2014, done with two other reviewers. Carlo Meghini was selected as Rapporteur.

## 9 Invited talks

- Providing services: search and beyond. International Conference on Research Infrastructures and e-Infrastructures for Cultural Heritage, Roma, 13-14 November, 2014.
- Challenges in Preserving Linked Data. Alliance for Permanent Access 2014 Conference, Brussels, 22-23 October 2014.
- Preserving Linked Data. DiPP2014, the The Fourth International Conference on Digital Presentation and Preservation of Cultural and Scientific Heritage, Veliko Tarnovo, Bulgaria, 18-21 September 2014.
- On the logical foundations of digital collections. iConference 2014 Workshop on Digital Collection Contexts: Intellectual and Organizational Functions at Scale, Berlin, 4 March 2014.
- A Service for User-Generated Content Management in Europeana. User Generated Content for Galleries, Libraries, Archives & Museums Workshop, Wien, 17 May 2011.
- Schema Integration in a Digital Library Federation. The 3rd International Symposium on Global COE Program of Center for Next-Generation Information Technology Based on Knowledge Discovery and Knowledge Federation, Hokkaido University, Sapporo, January 18-20, 2010.
- Is the Web a Digital Library? The Fifth Franco-Japanese Workshop ISIP: Information Search, Integration and Personalization, Lyon, France, October 2010.
- The Europeana Data Model. Very Large Digital Libraries (VLDL 2010) Workshop, held in conjunction with ECDL2010, the 14th European Conference on Research and Advanced Technology for Digital Libraries, Glasgow, UK, September 2010.
- An OAIS-based solution to the preservation of digital information. General architecture and analysis
  of the CASPAR approach to authenticity. *International Conference on Cultural Heritage on-line*,
  Florence, December 14-15, 2009.
- Modelling the web. the Fourth Franco-Japanese Workshop ISIP: Information Search, Integration and Personalization, Paris, France, 6-8 October 2008.
- Data modelling challenges in Europeana. Foundations of Digital Libraries (DLFoundations 2008)
   Workshop, held in conjunction with ECDL2008, the 12th European Conference on Research and Advanced Technology for Digital Libraries, Aarhus (Denmark), September 2008.
- Rationale and some principles for a very large digital library data model. Very Large Digital Libraries (VLDL 2008) Workshop, held in conjunction with ECDL2008, the 12th European Conference on Research and Advanced Technology for Digital Libraries, Aarhus (Denmark), September 2008.
- Document collections: Applying formal concept analysis to digital libraries. the Meme Media Workshop held in conjunction with the 4th International Symposium on Ubiquitous Knowledge Network Environment, Sapporo, Japan, March 2007.

## 10 Academic activities

#### 10.1 Conference Tutorials

- Building Digital Libraries on Service Oriented Architectures: Challenges, Experiences, and Results, tutorial given at:
  - ECDL 2007, the 11th European Conference on Research and Advanced Technology for Digital Libraries, 16-21 September 2007, Budapest, Hungary.
  - JCDL 2007, the 7th ACM IEEE Joint Conference on Digital Libraries, June 17 22, 2007, Vancouver, Canada.
  - ECDL 2006, the 10th European Conference on Research and Advanced Technology for Digital Libraries, September, 17-22, 2006, Alicante, Spain.
- Information Retrieval, Metadata and WWW Search Engines, tutorial given at WWW8, Eighth International Conference on the World Wide Web, Toronto, Canada, May 11-14, 1999.
- Multimedia Information Retrieval, tutorial given at ECDL 97, the First European Conference on Research and Advanced Technology for Digital Libraries.

## 10.2 International Seminars and Summer Schools

- Design of archaeological datasets. Summer School offered as a Trans-National Access activity in the context of the Ariadne project "Advanced Research Infrastructure for Archaeological Dataset Networking in Europe". Pisa 14–18 July, 2014 and Pisa, 6-10 July 2015.
- Producing, Consuming and Preserving Linked Data. The International Summer School ADA 2014
   Policies and Practices in Access to Digital Archives: Openness, Trustworthiness and Cost-efficiency,
   Split, Croatia, June 30 July 3, 2014.
- Introduction to the OAIS functional model. Future-proof AV content for education and research.
   Organized by the Department of Digital Humanities at Kings College London, Venice, 6-7 November 2014.
- Logical Foundations of the CIDOC Conceptual Reference Model. 31st CIDOC Special Interest Group meeting, Heraklion, Crete, 29 September 2 October 2014.
- Design of Archaeological Datasets. Opportunities within the Ariadne Network of The 20th Annual Meeting of European Association of Archaeologists, Istanbul, 10-14 September 2014.
- The Best Practice Network eCloud Europeana Cloud: Unlocking Europes Research via The Cloud.
   ICT Policy Support Programme Information Day, Rome, 11 March 2013.
- Modelling foundations for a cross-domain, cultural heritage infrastructure. *Primo Convegno Annuale dell'Associazione Informatica Umanistica e Cultura Digitale*. Florence, 13-14 December 2012.
- Introduction to the Europeana Data Model: Framework & Requirements. Seminar given at the Center for Informatics Research in Science and Scholarship (CIRSS) in the Graduate School of Library and Information Science (GSLIS) at the University of Illinois at Urbana-Champaign, Urbana Champaign, IL, March 8, 2012.
- A Model for Digital Libraries and its Translation to RDF. CIRSS Seminar Series, Graduate School for Library and Information Science (GSLIS) at the University of Illinois at Urbana-Champaign, Urbana Champaign, IL, March 9, 2012.

- Semantic web technologies for Digital Libraries. The DILL International Master on Digital Libraries Learning, Parma, 4-5 November 2011.
- Transistor workshop on Preservation techniques and methodologies for digital audiovisual works, 23
   June 2011, Heraklion, Creta.
  - Long Term Digital Preservation—Open Archival Information System: OAIS.
  - The Europeana Data Model.
- Very large digital libraries, an overview. Seminar given at the *Masses de donnes distribues. Ecole thmatique BDA*, Les Houches, Chamonix, France, 16-21 May 2010.
- The DELOS Digital Library Reference Model: Content and Functionality Domains. The DL.org & DILL Seminar on Research and Education on Digital Libraries, Parma, 9 November 2010.
- Semantic web technologies for Digital Libraries. The DILL International Master on Digital Libraries Learning, Parma, 21-22 October 2010.
- The DELOS Digital Library Reference Model: Functionality Domain. *The DL.org Autumn School*, Athens, 5 October 2010.
- The Europeana Data Model: tackling interoperability via modelling. *The DL.org Autumn School*, Athens, 5 October 2010.
- A data model for digital libraries. Max Planck eScience Seminar on Repository Systems, Garching, Germany, June 2009.
- DPE/Planets/CASPAR/nestor Joint Training Event: The Preservation Challenge: Basic Concepts and Practical Applications, Barcelona, March 22-25, 2009:
  - OAIS: a Reference Model for Preservation
  - Knowledge Service for Preservation
  - A Conceptual Model for Authenticity
- Sharing co-reference knowledge for data integration. Second DELOS Conference on Digital Libraries Pisa, Italy, December 2007.
- Ontologies and Information Access, the Joint DELOS-NSDL Summer School Digital Libraries for the Digital Librarian. Making the Journey from Traditional to Digital Libraries. June Florence, May 28th - June 1st, 2007.
- Information Access in Digital Libraries: Steps towards a Conceptual Schema. 8th International Workshop of the DELOS Network of Excellence on Digital Libraries on Future Digital Library Management Systems. Schloss Dagstuhl, Germany, March 29 - April 1, 2005.

## 10.3 University Courses

- Digital Knowledge Organization. Course at the DILL International Master in Digital Library Learning. Università degli Studi di Parma, September - December 2015.
- Conservazione di Archivi Digitali. DigiLab Centro interdipartimentale di Ricerca e Servizio dell'Università di Roma La Sapienza, Facoltà di Filosofia, Lettere, Scienze Umanistiche e Studi Orientali (http://digilab.uniroma1.it/Default.aspx).
- Knowledge Representation. La tenuta e la conservazione dei documenti digitali, Facoltà di lettere e filosofia, Università degli studi di Urbino Carlo Bo, marzo 2009.

- Information Retrieval. Master in Computer Science of the University of the Philipines, on December 2006 and December 2007.
- Information Retrieval. Master in Multimedia of the University of Florence, in the academic years 1998-1999 and 1999-2000.
- Databases. School of Engineering, University of Siena, Academic years 1994-1995 and 1995-1996.

## 11 Scientific supervision

## 11.1 Post-doctoral fellows

- 4 September 2006-3 June 2007, Giorgios Flouris, ERCIM Fellow.
- 1 October 2002–30 June 2003, Yannis Tzitzikas, ERCIM Fellow.
- 4 September 1995-3 March 1996, Michael Wolverton, ERCIM Fellow.

#### 11.2 Ph. D. theses

- Valentina Bartalesi Lenzi. From November 2013, PhD student in Information Engineering at Scuola di Dottorato in Ingegneria "Leonardo Da Vinci" of the University of Pisa.
- Jitao Yang. Un modele de donnees pour le bibliotheques numeriques. Ecole doctorale: Informatique de Paris-Sud, Specialite: Informatique, University of Paris South. June 2012. Co-directeur de these with prof. Nicolas Spyratos.

#### 11.3 Master theses

- Naresh Kumar. Expressing the needs of digital Audio- visual applications in different communities of practice for long term preservation. The DILL International Master on Digital Libraries Learning (http://dill.hio.no/), Oslo University College (Norway), Tallinn University (Estonia), and University of Parma. June 2014. Co-supervisor with Vittore Casarosa.
- Dydimus Zengenene. A Methodology for Publishing Linked Data in the Library Domain. The DILL International Master on Digital Libraries Learning (http://dill.hio.no/), Oslo University College (Norway), Tallinn University (Estonia), and University of Parma. June 2012. Co-supervisor with Vittore Casarosa.
- Stanislava Gardasevic. Opening Archives to General Public, a data modelling approach. The DILL International Master on Digital Libraries Learning (http://dill.hio.no/), Oslo University College (Norway), Tallinn University (Estonia), and University of Parma. June 2011. Co-supervisor with Vittore Casarosa.

He has supervised the following theses at the Corso di Laurea in Scienze dell'Informazione of the University of Pisa:

 Antonio Lopreiato. Implementazione e sperimentazione di un metodo deduttivo per logiche descrittive a quattro valori e fuzzy (Implementation and experimentation of a deductive method for 4-valued and fuzzy description logics). Academic year 1998–99.

- Daniele Lorenzoni. Utilizzo di un database relazionale a oggetti come supporto alla persistenza di un sistema per la rappresentazione della conoscenza basato su logiche descrittive (Using an objectrelational database for the persistence of a knowledge representation system based on description logics). Academic year 1997–98.
- Riccardo Marangone. Studio e sviluppo di uno strumento automatico a supporto di un modello logico per il recupero di immagini (Study and development of an automatic tool to support logic-based image retrieval). Academic year 1997–98.
- Piero Cima. Un dimostratore automatico di teoremi per lagiche descrittive basato su un calcolo di sequenti (An automatic theorem prover for description logics based on a sequent calculus). Academic year 1996–97.
- Paolo Buongarzoni e Rossella Salis. Aspetti teorici e computazionali di una logica terminologica (Theoretical and computational aspects of a description logic). Academic year 1993-94.
- Rita Verdicchio and Antonio Agostini. Progettazione ed implementazione di una interfaccia grafica per un linguaggio di rappresentazione della conoscenza basato su rete semantica (Design and implementation of a grphical user interface for a knowledge representation language based on a semantic network). Academic year 1989–90.
- Emilio Graziano and Rinaldo Guidi. Studio e realizzazione di organizzazioni di memoria secondaria per un linguaggio per la rappresentazione della conoscenza (Study and implementation of secondary storage organizations for a knowledge representation language). Academic year 1987–88.
- Aldo Pannocchia. Progettazione e implementazione di una interfaccia grafica per un linguaggio orientato agli oggetti (Design and implementation of a graphical user interface for an object-oriented language). Academic year 1987–88.

#### 11.4 Membership in Ph. D. Theses Committees

- Gianmaria Silvello. A Set-Based Approach to Deal with Hierarchical Structures. Scuola di Dottorato di Ricerca di Ingegneria dell'Informazione dell'Università degli Studi di Padova, XXIII ciclo. April 2011. Reviewer.
- El Hadji Mamadou Nguer. Bibliothèques numériques à taxonomie centrale: modélisation et mise en oeuvre. Ecole doctorale: Informatique de Paris-Sud, Specialite: Informatique, University of Paris South, July 2010. External reviewer (Rapporteur).
- Hanen Belhaj Frej Chaabane. Aspects dynamiques des bibliotheques numeriques: Systemes de notifications. Ecole doctorale: Informatique de Paris-Sud, Specialite: Informatique, University of Paris South, July 2009. External reviewer (Rapporteur).

## 12 Publications

## 12.1 Edited Scientific Journal Issues and Conference Proceedings

- Christoph Beierle and Carlo Meghini, guest editors. Annals of Mathematics and Artificial Intelligence. Special Issue about FoIKS 2014. Springer International Publishing, 2015. Print ISSN 1012-2443, Online ISSN 1573-7470.
- 2. Christoph Beierle and Carlo Meghini, editors. Foundations of Information and Knowledge Systems. 8th International Symposium, FoIKS. Number 8367 in Lecture Notes in Computer Science. Springer Verlag, Bordeaux, France, March 2014.

- 3. Y. Tanaka, N. Spyratos, T. Yoshida, and C Meghini, editors. Information Search, Integration and Personalization. International Workshop, ISIP 2012, Sapporo, Japan, October 11-13, 2012. Revised Selected Papers. Number 146 in Communications in Computer and Information Science. Springer-Verlag, 2013.
- 4. M. Agosti, F. Esposito, C. Meghini, N. Orio, et al., editors. *Digital Libraries and Archives: the* 7th Italian Research Conference, IRCDL 2011, Pisa, Italy, January 20-21, 2011. Revised Papers. Number 249 in Communications in Computer and Information Science. Springer-Verlag, 2011.
- S. Gradmann, F. Borri, C. Meghini, and H. Schuldt, editors. Proceedings of the international conference on Theory and practice of digital libraries: research and advanced technology for digital libraries. Number 6966 in Lecture Notes in Computer Science. Springer Verlag, Berlin, Germany, September 2011.
- Carlo Meghini, Norbert Fuhr, and Laszlo Kovacs, editors. Research and Advanced Technology for Digital Libraries, Proceedings of the 11th European Conference on Digital Libraries. Number 4675 in Lecture Notes in Computer Science. Springer Verlag, Budapest, Hungary, September 2007.
- 7. Carlo Meghini and Pasquale Savino, editors. Fourth Delos Workshop: Image Indexing and Retrieval, San Miniato, I, 1997. ERCIM.
- 8. Carlo Meghini and Fabrizio Sebastiani, editors. Theoretical and Experimental Aspects of Knowledge Representation, Pisa, I, 1992. ERCIM.

## 12.2 Books

Leonardo Candela, Donatella Castelli, Nicola Ferro, Georgia Koutrika, Carlo Meghini, Yannis Ioannidis, Pasquale Pagano, Seamus Ross, Dagobert Soergel, Maristella Agosti, Milena Dobreva, Vivi Katifori, and Heiko Schuldt. The DELOS Digital Library Reference Model - Foundations for Digital Libraries. DELOS Network of Excellence on Digital Libraries, 2007. ISBN 2-912337-37-X.

### 12.3 Book Chapters

- Carlo Meghini and Nicolas Spyratos. Unifying the concept of collection in digital libraries. In Zbigniew W. Ras and Li-Shiang Tsay, editors, Advances in Intelligent Information Systems, volume 265 of Springer Studies in Computational Intelligence, pages 197–224. Springer Verlag, 2010. ISBN: 978-3-642-05182-1.
- 11. Carlo Meghini, Martin Doerr, and Nicolas Spyratos. Managing co-reference knowledge for data integration. In Y. Kiyoki, T. Tokuda, H. Jaakkola, X. Chen, and N. Yoshida, editors, *Information Modelling and Knowledge Bases XX*, volume 190 of *Frontiers in Artificial Intelligence and Applications*, pages 224–244. IOS Press, Amsterdam, The Netherlands, January 2009.
- Carlo Meghini, Fabrizio Sebastiani, and Umberto Straccia. Model of multimedia information retrieval. In M. Tamer Ozsu and Ling Liu, editors, *Encyclopedia of Database Systems*, pages 1820–1824. Springer Verlag, 2009. ISBN: 978-0-387-35544-3.
- 13. Carlo Meghini and Fabrizio Sebastiani. Conceptual modelling in multimedia information seeking. In Peter P. Chen, Jacky Akoka, Hannu Kangassalo, and Bernhard Thalheim, editors, Conceptual Modeling: Current Issues and Future Directions, number 1565 in Lecture notes in computer science, pages 281–286. Springer Verlag, Heidelberg, DE, 1999.

- 14. Carlo Meghini, Fabrizio Sebastiani, and Umberto Straccia. MIRLOG: A logic for multimedia information retrieval. In C.J. van Rijsbergen, F. Crestani, and M. Lalmas, editors, Information Retrieval: Uncertainty and Logics. Advanced Models for the Representation and Retrieval of Information, volume 4 of The Information Retrieval Series, chapter 7, pages 151–185. Kluwer Academic Publishers, Boston, MA, October 1998. ISBN 978-1-4615-5617-6.
- C. Meghini, F. Rabitti, and C. Thanos. Multimedia storage and retrieval. In B. Furht and M. Milenkovic, editors, Guided Tour of Multimedia Systems and Applications. IEEE Computer Society Press, Los Alamitos, CA, March 1995.
- C. Meghini and C. Thanos. Multimedia document handling. In N. Seshagiri and A. Akapov, editors, Multimedia Computer and Communication: Technology and Application, pages 153–167. Tata McGraw-Hill, Bombay, 1992.
- C. Meghini, D. Castelli, and D. Musto. Architecture specification in TODOS. In B. Pernici and C. Roland, editors, Automatic Tools for Designing Office Information Systems: The TODOS Approach. Research Report ESPRIT, Projekt 813 (TODOS), Vol. 1, pages 171–200. Springer Verlag, Berlin, 1990.

## 12.4 Papers on International Scientific Journals

- 18. Carlo Meghini, Nicolas Spyratos, Tsuyoshi Sugibuchi, and Jitao Yang. A model for digital libraries and its translation to rdf. *Journal on Data Semantics*, 3(2):107–139, June 2014. ISSN 1861-2032.
- Karen M. Wickett, Antoine Isaac, Martin Doerr, Katrina Fenlon, Carole Palmer, and Carlo Meghini. Representing cultural collections in digital aggregation and exchange environments. D-Lib Magazine, 20(5/6), May 2014.
- 20. Carlo Meghini. Data preservation. Data Science Journal, 12:GRDI51-GRDI57, 2013.
- 21. Carlo Meghini, Nicolas Spyratos, and Jitao Yang. A data model for digital libraries. *International Journal on Digital Libraries*, 11:41–56, 2010.
- 22. Carlo Meghini and Nicolas Spyratos. Synthesizing monadic predicates. *Journal of Logic and Computation*, 18(6):831–847, December 2008.
- 23. Carlo Meghini, Yannis Tzitzikas, and Nicolas Spyratos. Abduction for accessing information sources. Fundamenta Informaticae, 83(4):355–387, 2008.
- 24. Carlo Meghini, Yannis Tzitzikas, and Nicolas Spyratos. A unified interaction scheme for information sources. *Journal of Intelligent Information Systems*, 26(1):75–93, January 2006.
- 25. F. Rabitti and C. Meghini. Intrinsic limits and possible results for research in multimedia semantics. Journal of Digital Information Management, 3(4):214, 2005.
- 26. Carlo Meghini, Fabrizio Sebastiani, and Umberto Straccia. A model of multimedia information retrieval. *Journal of the ACM*, 48(5):909–970, 2001.
- 27. C. Meghini. Logical image modelling and retrieval. The Computer Journal, 39(3):173–183, 1996.
- 28. C. Meghini and C. Thanos. An imal predicate locking scheduler. *Journal of Computer and Systems Sciences*, 53(3):443–468, December 1996.
- 29. C. Meghini, F. Rabitti, and C. Thanos. Conceptual modelling of multimedia documents. *Computer*, 24(10):23–30, October 1991.

- 30. C. Meghini and C. Thanos. The complexity of operations on a fragmented relation. *ACM Transactions on Database Systems*, 16(1):56–87, March 1991.
- 31. Conceptual document modelling and retrieval. Computer Standards and Interfaces, 11(3):195–213, 1991.
- 32. C. Meghini and C. Thanos. Querying fragmented relations in a distributed database. *Acta informatica*, 22(2):125–138, 1985.

## 12.5 Papers on the Proceedings of International Scientific Conferences

- 33. Nicola Aloia, Carlo Meghini, Christos Papatheodorou, Dimitris Gavrilis, and Franca Debole. Designing and implementing data registries: A case study for archaeology. In *Proceedings of ODBASE 2014*, The conference on Ontologies, DataBases, and Applications of Semantics for Large Scale Information Systems, volume 8841 of Lecture Notes in Computer Science, pages 768–775, Amantea, October 2014.
- 34. Carlo Meghini and Valentina Bartalesi. Steps towards enhancing the user experience in accessing digital libraries. In *Proceedings of HCII 2014, the 16th International Conference on Human-Computer Interaction*, volume 8522 of *Lecture Notes in Computer Science*, pages 555–566, Heraklion, Crete, Greece, 22 –27 June 2014.
- 35. Mirko Tavoni, Paola Andriani, Valentina Bartalesi, Elvira Locuratolo, Carlo Meghini, and Loredana Versienti. Towards a semantic network of Dante's works and their contextual knowledge. In *Proceedings of DH2014, Digital Humanities 2014*, Lausanne, CH, July 2014.
- 36. V. Bartalesi Lenzi, E. I. Locuratolo, C. Meghini, and L. Versienti. A preliminary study on the semantic representation of the notes to dante alighieri's convivio. In *Proceedings of DH-CASE 2013 1st International Workshop on Collaborative Annotations in Shared Environment: metadata, vocabularies and techniques in the Digital Humanities.* ACM, September 2013.
- 37. Francesco Gallo, Carlo Meghini, Walter Allasia, Fabrizio Falchi. Autonomic preservation of access copies of digital contents. In *Proceedings of The Memory of the World in the Digital age: Digitization and Preservation*, Vancouver, BC, September 2012.
- 38. N. Aloia, C. Concordia, and C. Meghini. Designing and implementing a user-generated content service for europeana. In *Proceedings of ECLAP 2012 Conference on Information Technologies for Performing Arts, Media Access and Entertainment*, pages 126–130. Florence University Press, May 2012.
- 39. Stanislava Gardasevic, Vittore Casarosa, Carlo Meghini. Improving online access to archival data. In *Proceedings of IRCDL 2012, the 8th Italian Research Conference on Digital Libraries*, volume 0354-2012 of *Communications in Computer and Information Science*, Bari, February 2012. Springer Verlag.
- 40. N. Aloia, C. Concordia, and C. Meghini. The europeana linked open data pilot server. In Proceedings of IRCDL 2012, the 8th Italian Research Conference on Digital Libraries, volume 0354-2012 of Communications in Computer and Information Science, Bari, February 2012. Springer Verlag.
- 41. Ekaterina Simonenko Carlo Meghini Nicolas Spyratos, Tsuyoshi Sugibuchi. Computing the skyline of a relational table based on a query lattice. In *Contributions of ICFCA 2012: the 10th International Conference on Formal Concept Analysis*, pages 145–161, Louvain, B, May 2012. Katholieke Universiteit Leuven. ISBN 978-9-08-140995-7.

- 42. N. Aloia, C. Concordia, and C. Meghini. ASSETS: Advanced service search and enhancing technological solutions for the european digital library. In *Digital Libraries and Archives. Proceedings of IRCDL 2011, the 7th Italian Research Conference on Digital Libraries*, number 249 in Communications in Computer and Information Science, pages 104–106, Pisa, Italy, January 2011. Springer-Verlag.
- 43. N. Aloia, C. Concordia, and C. Meghini. Europeana v1.0. In *Digital Libraries and Archives*. Proceedings of IRCDL 2011, the 7th Italian Research Conference on Digital Libraries, number 249 in Communications in Computer and Information Science, pages 127–129, Pisa, Italy, January 2011. Springer-Verlag.
- 44. N. Aloia, C. Concordia, A. van Gerwen, P. Hansen, M. Kuwahara, A. Ly, C. Meghini, N. Spyratos, T. Sugibuchi, Y. Tanaka, et al. Design, implementation and evaluation of a user generated content service for europeana. In *Proceedings of the international conference on Theory and practice of digital libraries: research and advanced technology for digital libraries*, number 6966 in Lecture Notes in Computer Science, pages 477–482, Berlin, Germany, September 2011.
- 45. M. Doerr, S. Gradmann, S. Hennicke, A. Isaac, C. Meghini, and H. van de Sompel. The europeana data model (edm). In *World Library and Information Congress: 76th IFLA General Conference and Assembly*, pages 10–15, Gothenburg, Sweden, August 2010.
- 46. G. G. Athanasopoulos, E. Fox, Y. Ioannidis, G. Kakaletris, N. Manola, C. Meghini, A. Rauber, and D. Soergel. A functionality perspective on digital library interoperability. In *Proceedings of ECDL* 2010, the 14th European Conference on Research and Advanced Technology for Digital Libraries, pages 675–677, Glasgow, UK, September 2010.
- 47. N.Spyratos and C.Meghini. Combining preference relations: Completeness and consistency. In Proceedings of PersDB 2010, the 4th International Workshop on Personalized Access, Profile Management, and Context Awareness in Databases, held in conjunction with VLDB 2010, Singapore, SG, September 2010.
- 48. Carlo Meghini, Nicolas Spyratos, and Tsuyoshi Sugibuchi. Modelling digital libraries based on logic. In *Proceedings of ECDL 2010*, the 14th European Conference on Research and Advanced Technology for Digital Libraries, pages 2–13, Glasgow, UK, September 2010. Springer.
- 49. N. Aloia, C. Concordia, and C. Meghini. Europeana: towards the european digital library. In *Proceedings of IRCDL 2009, the 5th Italian Research Conference on Digital Libraries*, pages 154–157, Padova, Italy, January 2009. The DELOS Association for Digital Libraries.
- 50. Carlo Meghini and Giuseppe Amato. Faceted content-based image retrieval. In Proceedings of FIND '08, the 2nd International Workshop on Dynamic Taxonomies and Faceted Search, held in conjunction with DEXA 2008 the 19th International Conference on Database and Expert Systems Applications, pages 402–406, Turin, Italy, September 2008. IEEE.
- 51. Carlo Meghini, Martin Doerr, and Nicolas Spyratos. Managing co-reference knowledge for data integration. In *Proceedings of EJC2008*, the 18th European-Japanese Conference on Information Modelling and Knowledge Bases, pages 229–248, Tsukuba, Japan, June 2008.
- 52. Carlo Meghini, David Giaretta, Luigi Fusco, Seamus Ross, Mariella Guercio, Mario Hernandez, Ugo Di Giammatteo, Zavisa Bjelogrlic, Dalit Naor, Silvia Boi, Daniel Terrugi, Kia Ng, Luigi Briguglio, Vassilis Christophides, Bruno Bachimont, and Hugues Vinetand Pavel Sedlak. CAS-PAR project and the validation of digital preservation techniques. In *Proceedings of PV-2007: Ensuring the Long-Term Preservation and Value Adding to Scientific and Technical Data*, Weßling, Germany, October 2007.

- 53. Carlo Meghini, Nicola Aloia, Cesare Concordia, and Francesco Furfari. The BRICKS desktop: a powerful GUI for the digital librarian. In *Proceedings of VAST 2007*, Future Technologies to Empower Heritage Professionals, Brighton, UK, November 2007.
- 54. Carlo Meghini, Nicola Aloia, and Cesare Concordia. Querying a BRICKS digital library. In Proceedings of the IADIS International Conference WWW Internet 2007, Vila Real (Portugal), October 2007.
- 55. Carlo Meghini, Nicola Aloia, and Cesare Concordia. Implementing BRICKS, a digital library management system. In *Proceedings of SEBD 2007*, the 15th Italian Symposium on Advanced Database Systems, Torre Canne, Brindisi, Italy, June 2007.
- 56. Carlo Meghini and Nicolas Spyratos. Viewing collections as abstractions. In *Digital Libraries:* Research and Development. Selected and Revised Papers from the First DELOS Conference, volume 4877 of Lecture Notes in Computer Science, pages 207–217, Pisa, Italy, February 2007.
- 57. Carlo Meghini, Martin Doerr, and Nicolas Spyratos. Leveraging on associations a new challenge for digital libraries. In *Proceedings of the First International Workshop on Digital Libraries Foundations, held in conjunction with the ACM IEEE Joint Conference on Digital Libraries*, Vancouver, BC, Canada, June 2007.
- 58. Carlo Meghini and Giuseppe Amato. Combining features for image retrieval by concept lattice querying and navigation. In *Proceedings of ICIAP 2007*, the 14th International Conference on Image Analysis and Processing, pages 107–112, Modena, Italy, September 2007. IEEE.
- 59. Carlo Meghini and Giuseppe Amato. Multi-faceted image retrieval by concept lattice querying and navigation. In *Proceedings of the 3rd Italian Research Conference on Digital Library Systems*, Padoa, Italy, January 2007.
- 60. Carlo Meghini and Giorgos Flouris. Some preliminary ideas towards a theory of digital preservation. In *Proceedings of the First International Workshop on Digital Libraries Foundations, held in conjunction with the ACM IEEE Joint Conference on Digital Libraries*, Vancouver, BC, Canada, June 2007.
- 61. G. Flouris and C. Meghini. Terminology and wish list for a formal theory of preservation. In *Proceedings of PV-2007: Ensuring the Long-Term Preservation and Value Adding to Scientific and Technical Data*, Weßling, Germany, October 2007.
- 62. Giorgos Flouris and Carlo Meghini. Steps towards a theory of information preservation. Invited talk at PRESDB07, International Workshop on Database Preservation. Edinburgh., March 2007.
- 63. Carlo Meghini and Nicolas Spyratos. Computing intensions of digital library collections. In Proceedings of ICFCA07, the 5th International Conference Formal on Concept Analysis, volume 4390 of Lecture Notes in Artificial Intelligence, pages 66–81, Clermont-Ferrand, France, February 2007.
- 64. Carlo Meghini and Nicolas Spyratos. Synthesizing knowledge for accessing digital libraries. In *Proceedings of the International Workshop on Knowledge Media Science, KMS 2006*, Meiningen, Germany, October 2006.
- 65. Carlo Meghini, Yannis Tzitzikas, and Nicolas Spyratos. Abduction for extending incomplete information sources. In Grigoris Antoniou, George Potamias, Costas Spyropoulos, and Dimitris Plexousakis, editors, Proceedings of Advances in Artificial Intelligence: 4th Helenic Conference on AI, SETN 2006, volume 3955 of Lecture Notes in Computer Science, pages 267–278, Heraklion, Crete, Greece, May 2006.

- 66. Carlo Meghini and Nicolas Spyratos. Preference-based query tuning through refinement/enlargement in a formal context. In J. Dix and S. Hegner, editors, *Proceedings of FoIKS 2006*, the fourth International Symposium on Foundations of Information and Knowledge Systems, volume 3861 of Lecture notes in computer science, pages 278–293, Budapest, Hungary, February 2006.
- 67. T. Risse, P. Knezevic, C. Meghini, R. Hecht, and F. Basile. The bricks infrastructure-an overview. In *Proc. of The International Conference "EVA 2005 Moscow"*, Moscow, Russia, November-December 2005.
- 68. Carlo Meghini and Yannis Tzitzikas. Querying articulated sources. In On the Move to Meaningful Internet Systems 2004, Proceedings of ODBASE 2004, International Conference on Ontologies, Databases and Applications of SEmantics, number 3291 in Lecture notes in computer science, pages 945–962, Agia Napa, Cyprus, October 2004. Springer Verlag.
- 69. Carlo Meghini, Yannis Tzitzikas, and Nicolas Spyratos. A unifying framework for flexible information access in taxonomy-based sources. In *Proceedings of the 6th International Conference On Flexible Query Answering Systems (FQAS)*, number 3055 in Lecture notes in artificial intelligence, pages 161–174, Lyon, France, June 2004. Springer Verlag.
- 70. Carlo Meghini, Yannis Tzitzikas, and Nicolas Spyratos. Towards a generalized interaction scheme for information access. In *Proceedings of the third International Symposium on Foundations of Information and Knowledge Systems (FoIKS 2004)*, number 2942 in Lecture notes in computer science, pages 291–301, Vienna, Austria, February 2004. Springer Verlag.
- 71. Carlo Meghini and Yannis Tzitzikas. Query evaluation in peer-to-peer networks of taxonomy-based sources. In On The Move to Meaningful Internet Systems 2003, Proceedings of CooPIS-2003, the Tenth International Conference on Cooperative Information Systems, number 2888 in Lecture notes in computer science, pages 263–281, Catania, Italy, November 2003. Springer Verlag.
- 72. Carlo Meghini, Yannis Tzitzikas, and Nicolas Spyratos. Taxonomy-based conceptual modeling for peer-to-peer networks. In *Proceedings of ER2003, the 22nd International Conference on Conceptual Modeling*, number 2813 in Lecture notes in computer science, pages 446–460, Chicago, Illinois, October 2003. Springer Verlag.
- 73. Carlo Meghini and Yannis Tzitzikas. Ostensive automatic schema mapping for taxonomy-based peer-to-peer systems. In M. Klusch, editor, *Proceedings of CIA-2003*, the Seventh International Workshop on Cooperative Information Agents Intelligent Agents for the Internet and Web, number 2782 in Lecture Notes in Artificial Intelligence, pages 78–92, Helsinki, Finland, August 2003. Springer Verlag. (Best Paper Award).
- 74. Carlo Meghini, Yannis Tzitzikas, and Nicolas Spyratos. An abduction-based method for index relaxation in taxonomy-based sources. In *Proceedings of MFCS 2003, 28th International Symposium on Mathematical Foundations of Computer Science*, number 2747 in Lecture notes in computer science, pages 592–601, Bratislava, Slovak Republic, August 2003. Springer Verlag.
- 75. Carlo Meghini, Donatella Castelli, and Pasquale Pagano. Foundations of a multidimensional query language for digital libraries. In C. Thanos and M. Agosti, editors, *Proceedings of ECDL 2002, the Sixth European Conference on Research and Advanced Technology for Digital Libraries*, number 2458 in Lecture notes in computer science, pages 251–265, Heidelberg, DE, September 2002. Springer Verlag.
- 76. Carlo Meghini, Fabrizio Sebastiani, and Umberto Straccia. A system for the fast prototyping of multidimensional image retrieval. In *Proceedings of ICMCS-99, IEEE International Conference on Multimedia Computing and Systems*, pages 603–609, Firenze, IT, 1999.

- 77. Carlo Meghini, Fabrizio Sebastiani, and Umberto Straccia. The terminological image retrieval model. In Carlo Meghini and Pasquale Savino, editors, *Proceedings of the Fourth Delos Workshop: Image Indexing and Retrieval*, San Miniato, I, 1997. ERCIM.
- 78. Carlo Meghini, Fabrizio Sebastiani, and Umberto Straccia. On the role of logic in image retrieval. In Proceedings of the Workshop on Image and Video Content-Based Retrieval of the Italian Chapt. of the Pattern Recognition Society, Milan, February 1998.
- 79. Carlo Meghini, Fabrizio Sebastiani, and Umberto Straccia. Modelling the retrieval of structured documents containing texts and images. In Costantino Thanos, editor, *Proceedings of ECDL-97*, the First European Conference on Research and Advanced Technology for Digital Libraries, number 1324 in Lecture notes in computer science, pages 325–344, Pisa, September 1997. Springer Verlag, Heidelberg, FRG.
- 80. Carlo Meghini, Fabrizio Sebastiani, and Umberto Straccia. The terminological image retrieval model. In Alberto Del Bimbo, editor, *Proceedings of ICIAP'97, 9th International Conference On Image Analysis And Processing*, number 1311 II in Lecture notes in computer science, pages 156–163, Florence, I, September 1997. Springer Verlag, Heidelberg, FRG.
- 81. Carlo Meghini, Fabrizio Sebastiani, and Umberto Straccia. Reasoning about the form and content for multimedia objects. In *Proceedings of AAAI 1997 Spring Symposium on Intelligent Integration and Use of Text, Image, Video and Audio Corpora*, pages 89–94, Stanford, California, 1997.
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