



# 1st International Conference on Automated Production of Cross Media Content for Multi-channel Distribution

*Convitto della Calza, Oltrarno Meeting Centre  
Piazza della Calza, Florence, Italy, 30 November - 2 December 2005  
<http://www.axmedis.org/axmedis2005>*

Current developments in the cross media domain require innovative and new technologies to meet the challenges of the marketplace. The AXMEDIS conference combines the activities of the WEDELMUSIC conference series ([www.wedelmusic.org](http://www.wedelmusic.org)) with the AXMEDIS consortium.

This event seeks to promote discussion and interaction between researchers, practitioners, developers and users of tools, technology transfer experts, and project managers. AXMEDIS-2005 will bring together a variety of participants from the academic, business and industrial worlds, to address different technical and commercial issues. Particular interests include the exchange of concepts, prototypes, research ideas, industrial experiences and other results.

The conference focuses on the challenges in the cross-media domain (including production, protection, management, representation, formats, aggregation, workflow, distribution, business and transaction models), and the integration of content management systems and distribution chains, with particularly emphasis on the reduction of costs and solutions for complex cross-domain problems.

## Preliminary Program includes

- Scientific and industrial Papers
- Tutorials
- Presentation of AXMEDIS Call for Take Up
- Workshop on MUSICNETWORK and MPEG Symbolic Music Representation
- Educational solutions, Music and Multimedia, Interactive Music
- Workshop on The role of collecting societies in the digital era
- Workshop on Virtual Goods Technical, Economic and Legal Aspects of Business Models for Virtual Goods
- Panel on European Accessible Information Network (EUAIN)

## Conference Programme

### AXMEDIS 2005

30 November			1st December				2nd December				
Plenary	Room 1	Room 2	Plenary	Room 1	Room 2	Room 3	Plenary	Room 1	Room 2	Room 3	
09:00-09:30	registration		09:30-10:00	Opening		10:00-10:30	coffee break		10:30-11:00	Presentation of the Call for take up action, aim of AXMEDIS framework	
11:00-11:30	Keynote speaker		11:30-12:00	Dr. Leonardo Chiariglione		12:00-12:30	Panel "The role of Collecting Societies in the digital era"		12:30-13:00	MPEG Tutorial	
13:00-13:30	lunch		13:30-14:00			14:00-14:30	Semantics and knowledge		14:30-15:00	coffe break	
14:30-15:00	Content Modeling		15:00-15:30	Content Standards		15:30-16:00	AXMEDIS Tutorial General Overview		16:00-16:30	poster section	
16:30-17:00	coffe break		17:00-17:30	Content and Distribution Services		17:30-18:00	AXMEDIS Tutorial Content Production		18:00-18:30	MII-MPEG SMR Workshop	
18:30-19:00			19:00-19:30	Content and Distribution and Gathering		19:30-20:00	AXMEDIS Tutorial Content Production		20:00- ....	MII-MPEG SMR Workshop	
20:00- ....	Welcome cocktail		20:00- ....	AXMEDIS Tutorial on Usability		20:00- ....	Virtual Good Workshop		20:00- ....	AXMEDIS Tutorial on Usability	
20:00- ....	Social Dinner		20:00- ....	Virtual Good Workshop		20:00- ....	AXMEDIS Tutorial on Usability		20:00- ....	Assembly Musicnetwork Association MIA	
20:00- ....	Closing Session		20:00- ....			20:00- ....			20:00- ....		

# Detailed Program

## Opening with

- Consigliere Paolo Vigevano, *Head of the Technical Secretariat of the Italian Minister for Innovation Technologies*
- Prof. Augusto Marinelli, *Magnifico Rettore Universita' degli Studi di Firenze*
- Dr. Enrico Bocci, *responsible for the Presidency of Assindustria Firenze for the Information Technologies*
- Prof. Paolo Nesi, *Coordinator of AXMEDIS, Universita' degli Studi di Firenze, DSI, DISIT*

## Keynote Speaker

- Balancing Protection of Intellectual Property and its Use  
Leonardo Chiariglione, CEDEO (I), ([www.chiariglione.org](http://www.chiariglione.org))

## Scientific papers

### Section: Architecture (chair: David Carboni, CRS4, Italy)

- *A Mix-Down Assistant Interface with Reuse of Examples* - H. Katayose, A. Yatsui, M. Goto
- *AXMEDIS Tool Core for MPEG-21 Authoring/Playing* - P. Bellini, P. Nesi, D. Rogai, A. Vallotti

### Section: Content Market (chair: David Fuschi, ILABS, Italy)

- *Managing Intellectual Property Rights in the WWW: Patterns and Semantics* - R. Gil, R. Tous, J. Delgado
- *Doc@Hand: Information and Knowledge Natural Language Ontology-driven Access Through Web Services in the Healthcare Domain*, M. Simonov, L. Sammartino, M. Ancona, S. Pini, W. Cazzola, M. Frascio

### Section: Content Modeling (chair : Laurence Perarce, XIM, UK)

- *MXDemo: a Case Study about Audio, Video, and Score Synchronization* - A. Baratè, G. Haus, L. A. Ludovico, G. Vercellesi
- *Producing Music with N - Delta Interfaces* - D. Margounakis, D. Politis
- *Real-time Synthesis and Transformation of Ambient Sounds* - D. Dobler
- *Estimating Quality of Playlists by Sight* - A. Andric, G. Haus

### Section: Content Distribution (chair: Domenico Dato, TISCALI, Italy)

- *New Stream Caching Schemas for Multimedia Systems* - J. Fernandez, J. Carretero, F. García-Carballeira, A. Calderón, J. M. Perez
- *StreamOnTheFly: a Peer-to-peer Network for Radio Stations and podCasters* - R. Alton-Scheidl, A. Micsik, M. Pataki, W. Reutz, J. Schmidt, T. Thurner
- *Innovative Applications for Content Distribution & Consumption in Tourism & Education using PDA or Mobiles* - D. L. Fuschi, G. Bo, Y. Saadia
- *Workflow Data Exchange Semantics, Object Discovery & Integration Architecture for Cross Media Production & Distribution* - A. Badii, M. Sailor, C. Marangoni, A. Neglia, and L. Pearce

### Section: Semantics and Knowledge (chair: Kia Ng, Univesity of Leeds, UK)

- *Semantic Audio Hyperlinking: a Multimedia-Semantic Web scenario* – G. Tummarello, C. Morbidoni, P. Puliti, F. Piazza
- *The LOA Customizable Media Aggregator* - G. Attardi, A. Carboni, E. Del Dottore, P. Di Marcello
- *An Architecture of Automating Production of Cross Media Content for Multi-channel Distribution* - P. Bellini and P. Nesi
- *A Distributed Environment for Automatic Multimedia Content Production based on GRID* - P. Bellini, I. Bruno, P. Nesi

### Section: Security DRM - Content Security and Digital Rights Management, I (chair: Andrea Vallotti, DSI, University of Florence, Italy)

- *On Multicast Fingerprinting and Collusion Security* - Josep D. Ferrer, F. Sebé, A. Martínez-Balleste
- *Interoperability Between Different Rights Expression Languages and Protection Mechanisms* - J. Prados, E. Rodriguez, J. Delgado

### Section: Content Tools (chair: Royce Neagle, Univesity of Leeds, UK)

- *Market Potential for Interactive Audio-Visual Media* - A.

Leurdijk and S. Limonard

- *Agent-based Simulation for Modelling the Distribution of Online Music* - S. Schuster and N. Gilbert
- *Gaming or Sharing at LAN-Parties — What is going on?* – M. Fetscherin, C. Kaskiris, and F. Wallenberg
- *Bringing Music Industry into the Interactive Multimedia Age* - D. Crombie, D.d Fuschi, N. Mitolo, P. N., K. Ng, B. Ong

### Section: Standards (chair: Giorgio Zoia, EPFL, CH)

- *Use of Standards for Implementing a Multimedia Information Protection and Management System* – V. Torres, E. R., S. Llorente, J. Delgado
- *Efficient Delivery within the MPEG-21 Framework* – S. Davis and I. Burnett
- *Performance Profile for an Embedded Java OMA DRM 2 Agent* - D. Thull
- *MPEG-7 and the Semantic Web: An Hybrid Approach for Semantic and Behavioral Descriptions in Interactive Object-Oriented Multimedia Applications* - Y. Naudet, D. Mathevon, A. Vagner

### Section: Peer-to-Peer and Distribution (chair: Jaime Delgado, University Pompeu Fabra, Spain)

- *Designing Peer-to-Peer Systems for Business-to-Business Environments* - D. Carboni, M. Deriu, C. Lai, A. Pintus
- *BitTorrent in a Dynamic Resource Adapting Peer-to-Peer Network* - L. Rong and I. Burnett

### Section: Content and Distribution Services (chair: Fabrizio Fioravanti, EXITECH, Italy)

- *A Music Recommendation System Based on Annotations about Listeners' Preferences and Situations* - K. Kaji, K. Hirata, K. Nagao
- *Weblog-style Video Annotation and Syndication* - D. Yamamoto, S. Ohira, and K. Nagao
- *Experimental Validation of a Service Oriented Network Architecture Applied to Global Grid Computing* - B. Martini, F. Baroncelli, P. Castoldi, A. Aprigliano
- *AXMEDIS Framework for Programme and Publication and On-Demand Production* - K. Ng, B. Ong, R. Neagle, P. Ebinger, M. Schmucker, I. Bruno, P. Nesi

### Section: Security DRM Descriptors - Content Security and Digital Rights Management, II (chair: Silvia Llorente, University Pompeu Fabra, Spain)

- *Keyword Extraction in Open-Domain Multilingual Textual Resources* - A. Panunzi, M. Fabbri, and M. Moneglia
- *Cross Media Digital Rights Management for Online Music Stores* - Konstantinos Chorianopoulos, J. Barria, T. Regner, and J. Pitt
- *Watermark: From Paper Texture to Digital Media* - H. Hiary and K. Ng

### Poster Section (chairs: Atta Badii, IRC, UK; Claudio Marangoni, HP, Italy)

- *Peer-to-Peer Internet Television* - P. Hulsen, E. Vlemmix, K. Baker
- *A Visual Interface for Conducting Digitally Stored Music – A Proposal* - R. Behringer
- *A Protected Digital Item Declaration Language for MPEG-21* - S. Lauf and I. Burnett
- *Object Life Cycles & Interaction Environments for Cross Media Production & Distribution* - A. Badii, M. Sailor, C.o Marangoni, A. Neglia, L. Pearce
- *RADAMES A New Management Approach to Opera: Repertory, Archives and Related Documents* - A. Pompilio, L. Bianconi, F. Regazzi, P. Bonora
- *BeLearning: Accessibility in Virtual Knowledge Spaces for Mathematics and Natural Sciences* - N. Dahlmann, S. Jeschke, R. Seiler, H. Vieritz
- *The INTRINSIC Project: Helping Regional Identity Products Thrive in the Internet Age* - S. Lusso, F. Tariffi, and P. Alongi
- *SCALEX - Personalized Adaptive Multimedia Information System for Museums and Exhibitions* - J. Martin

## Industrial Papers

### Section: Cultural Heritage (chair: David Crombie, FNB, The Netherlands)

- *An Archive of Multimedia Objects on-Line Using WEDELMUSIC: the Experience of Arcipelago Music Study Center* – R. Lonoce, Arcipelago Musica, Milan, Italy
- *European Projects for Art Schools: The MultimediArt Project* – E. Delle Donne, PIXEL
- *New services for the public in a technology-related approach: the AXMEDIS project inside Accademia Nazionale di Santa Cecilia* – A. Bini, R. Grisley, T. dell'Orto (Accademia Nazionale di Santa Cecilia)
- *European Projects for Art Schools: The Art-Net project* – E. Delle Donne, PIXEL

### Section: Content Modeling and Gathering (chair: Ivan Bruno, DSI, University of Florence, Italy)

- *Identifying and Defining Customer Orientated Best Practice Business Models within a Cross Media Environment – The INCCOM Projec.* – J. Vallanen, K. Modee, F. Munich, L. K. Brown
- *Focuseek Crawler for gathering content* – N. Baldini, PSION soft
- *Jackson: DJ Software Powered by Musical Metadata* – F. Van Aeken
- *Multimedia Content Management and Streaming Services Platform* - Alberto Canadé, Datamat Spa

### Section: Distribution and reporting (chair: Orazio Pulvidenti, EUTELSAT, FR)

- *mReplay: Mobile Sports Replay and Fan Democracy* – P. F. Riley (University of California, Berkeley, US), E. Schubert (University of Munich, Germany)
- *Digital Items: Event Reporting Integration with Company Business Models* – F. Fioravanti, M. Spinu, M. Campanai, Exitech, Italy
- *Keeping Control of Online Assets Using Windows Media DRM 10* – D. Burbidge, Stream UK Media Services Limited, UK

### Section: Music and sound

- *S2S<sup>2</sup> action, Sound to Sense, Sense to Sound* – N. Bernardini, Media Innovation Unit Firenze Tecnologia

### Musicnetwork Workshop

- *MPEG Symbolic Music Representation, history and facts* - P. Bellini (DSI, Italy), M. Campanai (EXITECH, Italy), P. Nesi (DSI), G. Zoia (EPFL, CH)
- *Accessible Symbolic Music Representations* – D. Crombie, R. Lenoir, N. McKenzie (FNB, The Netherlands)
- *Meaningful mapping: Appreciating music through accessible structures* – D. Crombie, R. Lenoir, N. McKenzie, (FNB, The Netherlands)
- *MPEG Symbolic Music Representation and Music Education Software* – T. Weide (City University London, UK)
- *The Symbolic Music Representation of Traditional Korean Music* - Yong-Soo Choi, Hyoung-Joong KIM (Kangwon National University, Korea)
- *Integrating music representations within MPEG environments* – D. Crombie, R. Lenoir, N. McKenzie (FNB, The Netherlands)

### PANEL The role of collecting societies in the digital era (chair: Isabella Longo, AFI, Italy)

- *Welcome and introduction* – I. Longo AFI Int'l Coordinator
- *DRM: approach from the Authors' Collecting Societies* – M. Gauvin, SDAE International Relations (Spain)
- *Artists rights management: from SIREX project to the DRM* – M. Sansaini General Manager IMAIE (Italy)
- *Producers rights collective management perspective* – D. McGonigal Director, Government Relations (Phonographic Performace Limited UK)
- *The FastTrack network : overview and aims* – A. Brunetti SIAE (Italy)

### Workshop on Virtual Goods (chairs: Rüdiger Grimm, Jürgen Nützel, Technical University Ilmenau)

- *The Future of a Service-Focused Recorded Music Industry* - S. Graham Saunders
- *An economic analysis of music download platforms* – A. Will
- *The Value of Metadata in the Digital Music Industry* – M. Cremer, P. DiMaria
- *Privacy for Digital Rights Management Products and their Business Cases* – R. Grimm
- *iRights.info: The need for reliable and trustworthy consumer information after copyright revision in Germany* – M. Spielkamp
- *Justice Psychology meets Digital Rights Dilemma* – N. Döring, F. Fellenberg
- *Automatic Image Theft Detection in eBay by Digital Watermarking* – M. Steinebach, E. Kremer, L. Croce Ferri
- *Multi-Level Markets for Virtual Goods* – A. U. Schmidt
- *Alternative Distribution Models based on P2P* – M. Schmucker, P. Ebinger
- *An Incentive Based Distribution System for DRM Protected Content Using Peer-to-Peer Networks* – H. Rajasekaran
- *Business models for location based access to cultural heritage* - L.-F. Pau, B. Rees

### Panel on European Accessible Information Network (EUAIN) (chairs: David Crombie, Neil McKenzie, FNB, The Netherlands)

- *Open Source and Open Standards as tools for accessibility* – D. Crombie, R. Lenoir, B. Guillon, N. McKenzie, (FNB, The Netherlands)
- *EUAIN Overview* – D. Crombie, R. Lenoir, N. McKenzie, (FNB, The Netherlands)
- *Managing electronic content for adaptation to the reader's profile: project MultiAbile for the inclusion of e-Learners with disabilities* - T. Barbieri, A. Bianchi, L. Sbattella, F. Carella, M. Ferrà, P. Santini
- *Indexing tools and methods for making multimedia content accessible* – M. Horstmann, G. T. Ioannidis, M. Lorenz, K. N. Geramani

### Tutorials

- **MPEG-7 and MPEG-21 Tutorial:** C. Timmerer and H. Hellwagner, Klagenfurt University, Department of Information Technology (ITEC)
  - MPEG Standards Enabling Universal Multimedia Access
- **AXMEDIS Tutorial general overview**
  - AXMEDIS Architecture and benefits
  - why AXMEDIS is useful for your business and/or research
  - solution for content production, processing protection and distribution
- **AXMEDIS Tutorial on content production**
  - Content Model, AXMEDIS model, GRID production and processign of content
  - massive protection of content, production on demand, etc.
- **AXMEDIS Tutorial on content distribution**
  - Content distibution and protection
  - exploiting AXMEDIS framework for your distribution chain
  - Content Distribution towards PC via Internet
  - Content Distribution by using satellite data broadcast
  - Content Distribution towards PDA via Kiosk, for museums, cinemas, disco, events, theatres, etc.
- **AXMEDIS Tutorial on Usability**
  - Tutorial on user-centred product creation - Elke-Maria Melchior (ACIT, Germany)

### AHG meeting on MPEG SMR

AHG Chairs: Paolo Nesi (DSI), Giorgio Zoia (EPFL)

In Collaboration with the MUSICNETWORK International Association

- Review of RM0 of the MPEG SMR
- Core Experiment on Braille and Spokne Music
- Core Experiment on Korena Music

### MUSICNETWORK International Association: Ordinary Members General Meeting

**General Chair:**

Paolo Nesi

DSI-DISIT, University of Florence, Italy

nesi@dsi.unifi.it www.dsi.unifi.it/~nesi

**Research co-chairs**

Kia Ng ICSRiM, University of Leeds Leeds, UK

kia@computer.org, www.kcng.org

Jaime Delgado Universitat Pompeu Fabra Barcelona, Spain

jaime.delgado@upf.edu

Atta Badii IRC, University of Readings UK

atta.badii@reading.ac.uk

**Industrial co-chairs:**

Claudio Marangoni HP, Italy

claudio.marangoni@hp.com

Laurence Pearce xim Ltd, UK

laurence@xim.co.uk

**Publicity chair:**

Nicola Mitolo, DSI-DISIT, University of Florence, Italy

mitolo@dsi.unifi.it

**Local Committee chair**

Pierfrancesco Bellini DSI-DISIT, Univ. of Florence, Italy

pbellini@dsi.unifi.it

**Secretarial & Administration**

Simonetta Ceglia DSI-DISIT, Univ. of Florence, Italy

ceglia@dsi.unifi.it

Bee Ong ICSRiM, University of Leeds, UK

bee@icsrim.org.uk

**International Programme committee**

M. Arnold (Fraunhofer-IGD, DE); A. Badii (Univ. Readings, UK); D. Bainbridge (Univ. Waikato, NZ); J. Barthélemy (IRCAM, Fr); P. Bellini (DSI, I); F. Bixio (AFI, I); H. Brandl (Infineon, DE); W. Buhse (CoreMedia, DE); A. Camurri (Univ Genoa, I); D. Carboni (CRS4, I); G. Cesaretti (CPR, I); S.K. Chang (Univ. Pittsburgh, USA); B. Cotiànon (IRISA/INRIA, F); D. Crombie (FNB, NL); R. Dannenberg (CMU, USA); J. Delgado (FUPF, S); U. Dietz (Vodafone, DE); C. Dorai (IBM, USA); I. Fujinaga (McGill Univ., CA); D. Fuschi (ILABS, I); S. George (University of South Australia, AU); M. Girer (LISTESSO Sàrl, F); R. Grimm (Technical Univ. Ilmenau, DE); F. Hartung (Ericsson Research, DE); K. Hirata (NTT, J); P. Hobson (Motorola, UK); P. Kafno (HD Thames/Univ. Nottingham, UK); T. Kalker (HP, USA); A. Karydis (ANALYSIS Systems Research High-Tech S.A., G); D. Keislár (CMJ & Musclefish, USA); P. Kruger (TISCALI, I); E. Lambert (Silver Lining Project, I); A. Lindsay (Univ. Lancaster, UK); S. Llorente (FUPF, S); M.S. López-Lago (Fundacion Albeniz, S); C. Marangoni (HP, I); M. Mattavelli (EPFL, Sw); P. Nesi (DSI, I); K. Ng (ICSRiM, Univ. Leeds, UK); R. van Noetsele (Chello Broadband nv); J. Nuetzel (Technische Univ. Ilmenau, DE); L. Pearce (XIM, UK); M. Russ (BT Exact, UK); M. Schmucker (FHGIGD, DE); P. Stollenmayer (Eurescom GmbH, DE)

**Conference Location:***Convitto della Calza, Oltrarno Meeting Centre,*

Piazza della Calza, Florence, Italy

<http://www.axmedis.org/axmedis2005/location.html>**Conference Programme:**<http://www.axmedis.org/axmedis2005/program.html>**Registration Form:**<http://www.axmedis.org/axmedis2005/registration.html>Please return the registration form to **Cristina Dolfi**, Ufficio Ricerca Polo 2, Università di Firenze

Fax: +39-055-4598929 or +39-055-4598912

For any further queries, please contact: [ceglia@dsi.unifi.it](mailto:ceglia@dsi.unifi.it)  
or [bee@icsrim.org.uk](mailto:bee@icsrim.org.uk)**AXMEDIS Consortium**

ACIT - ADVANCE CONCEPTS FOR INTERACTIVE TECHNOLOGY GMBH, Germany

AFI - ASSOCIAZIONE DEI FONOGRAFICI ITALIANI, Italy

ANSC - ACCADEMIA NAZIONALE DI SANTA CECILIA, FONDAZIONE, Italy

CPR - CONSORZIO PISA RICERCHE, Italy

CRS4 - SOCIETA CONSORTILE A RESPONSABILITA' LIMITATA CENTRO DI RICERCA, SVILUPPO E STUDI SUPERIORI IN SARDEGNA, Italy

DIPITA - Second Major Department: Dipartimento di Italianistica, Università degli Studi di Firenze, Italy

DSI-DISIT Dipartimento di Sistemi e Informatica, Università degli Studi di Firenze, DISIT Lab., Italy

EPFL - ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE, Switzerland

EUTELSAT S.A., France

exITECH srl , Italy

FHGIGD - FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V. , Germany

FUPF - FUNDACION UNIVERSITAT POMPEU FABRA, Spain

HP - HEWLETT PACKARD ITALIANA S.R.L., Italy

ILABS - GIUNTI INTERACTIVE LABS S.R.L. Italy

IRC - THE UNIVERSITY OF READING, UK

SEJER REPRESENTING BORDAS AND NATHAN, France

TISCALI S.P.A., Italy

ICSRiM, UNIVERSITY OF LEEDS, UK

XIM LIMITED, UK

Supported by:

