



Virtuality Conference Turin, November 3-6, 2005

Program

THURSDAY, NOVEMBER 3rd

morning

TORINO INCONTRA CONVENTION CENTRE

8:30 Registration and opening of the XBOX Room, of the Immersive ART Room and of the exhibition stands

Cavour Hall

9:00 **WELCOME AND INTRODUCTION**
Gianfranco Balbo Computer Science Department's Vicerector at the University of Turin and President of the Virtuality Organizing Committee.

10:00 **TRIBUTE TO**
The Moving Picture Company (MPC)
With **Michael Elson** Executive Director of Production at MPC.
Moving Picture Company, MPC, is one of the most important studios worldwide concerning animation and digital effects for commercials, television and cinema. MPC created very high profile advertising campaigns for clients like Nike, Levi's, Stella Artois and Adidas, TV programs for BBC, Channel 4 and Discovery Channel, and it took care of the visual effects for many blockbusters: from **Tomb Raider** to the **Harry Potter** series, from **Troy** to **Alien vs Predator**, from **Batman Begins** to the recent **Charlie and the Chocolate Factory** and the coming **Wallace & Gromit: The Curse of the Were-Rabbit**. During the MPC's presentation, Michael Elson traces its history, telling it through its most important productions.

11:15 **ANIMATION AND VISUAL EFFECTS. SESSION I**
INVITED TALK
The Past, Present and Future of Motion Capture
Alberto Menache Digital Effects Supervisor at Sony Pictures Imageworks
A *motion capture* pioneer, Alberto Menache collaborated with most of the test Sony Pictures Imageworks productions, including the recent **The Polar Express** and the Academy Award nominated **Stuart Little2** and **Superman Returns**. He has worked on many TV commercials and videogames, and he is the author of **Understanding Motion Capture for Computer Animation and Video Games**, a fundamental text about the use of *motion capture* in modern animation.



12:15 **INVITED TALK**

Light Them in Post: The Light Stage Performance Relighting Process

Paul Debevec expert in techniques of 3D synthetic illumination, Director of the Institute for Creative Technology of the USC-University of Southern California, winner of the 2004 Siggraph award and of the 2004 Ars Electronica prize for his famous digital reconstruction of the Parthenon.

A Master in 3D synthetic illumination, Paul Debevec will present new techniques for filming an actor's performance in such a way that the lighting on the actor can be designed and modified in postproduction. These techniques allow the actors to be realistically composited into a background plate or a virtual set to appear as if they were truly there. The talk will overview previous light stage processes used to create digital actors with realistic reflectance in recent feature films and present the latest results in lighting actors with spatially varying illumination such as shadows from leaves and Venetian blinds.

Giolitti Hall

9:25 **MIMOS. Simulation in the Field of Aerospace**

MIMOS Association (Italian Movement for Modelling and Simulation), which hosts boards, companies, professionals, and universities working in the simulation and virtual reality field, organizes on the same days as Virtuality Conference its 5th annual technical-scientific symposium. At MIMOS about forty personalities, among the most qualified Italian and foreign experts, give an encompassing description of the most up to date instruments and application methods now available in the simulation field. To see the complete program of MIMOS, please visit <http://www.mimos.it/Eventi/Programma.pdf>.

Einaudi Hall

9:00 **Siggraph Reloaded**

From the most important worldwide trade show on digital graphics and interactive techniques, which takes place in Los Angeles, a video section shows the entire **Electronic Theater** and **Animation Theater** programs, the most important and significant international collections.

Virtuality's Collection. Video Art from the World

A selection of the best videos submitted to Virtuality from all over the world.

The alternate screening of Virtuality Collection and Siggraph Reloaded continue for the whole duration of Virtuality

XBOX Room

9:00 **Try the XBOX 360!**
Organized by **Microsoft**

Ten *demo stations* of the upcoming XBOX 360, to be tried by the public.
Continues for the whole duration of Virtuality



Virtual Theater

9:00

VR Show: Interactive VR Art Exhibit.

Ten installations of artists from all over the world let the public experience immersive art. Art takes the passion of cutting edge technology in order to expand its sphere of creativity to the whole of visual perception. Featuring works by **Josephine Anstey, Bino & Cool, Franz Fischnaller, Hans Hauska, Torbjorn Johansson, Jackie Matisse, Dan Neveu, Dave Pape, Agueda Simo**, these installations are created for VR CAVE systems or CAVE-like VR systems: large-screen projection-based displays, with interactive 3D stereo graphics, and tracking systems for user interaction.

Continues for the whole duration of Virtuality

afternoon

TORINO INCONTRA CONVENTION CENTRE

Cavour Hall

2:00

HAUTE VOLTIGE. Joint plenary session with MIMOS

A real-time exhibition of Virtual Haute Voltige Team, the first virtual acrobatic patrol in the world – currently part of the FAI, International Aeronautical Federation, and made up of five pilots and a video maker – shows what is possible by making the most of modern flight simulators made for personal computers, and the possibility they provide to fly multiplayer through the internet. The show, lasting about 20 minutes, draws attention to the difficulties of flying in virtual formation and the cleverness of the pilots who trained themselves in the last three years by flying through the net.

2:30

INTUITION. Joint plenary session with MIMOS

With **Bruno Arnaldi** Computer Graphics Researcher at the INRIA-Institut National de Recherche in Informatique et en Automatique, **Angelos Amditis** Professor at the ICCS-Institute of Communication and Computer Systems, **Teresa De Martino** Scientific Officer at the European Commission, **Enrico Gaia** Aerospace Engineer Alcatel Alenia Spazio, **Nicoletta Marchiandi Quatraro** Director of the Innovation & Technology department of the Turin Camera di Commercio, **Fabio Salsedo** Senior Research Engineer at Scuola superiore Sant'Anna
Chair **Giuseppe Varalda** Senior Project Manager at CRF-Centro Ricerche Fiat

A Network Of Excellence founded by the European Union, INTUITION works to promote virtual reality and virtual environment applications for future workspaces. The forum aims to provide an effective and vital opportunity for Italy to develop technologies and virtual applications coherently with the general objectives pursued by the network at an international level.

Giolitti Hall

5:00

MIMOS. Territory and Virtual Reality



Einaudi Hall

2:00 Siggraph Reloaded

Virtuality's Collection. Video Art from the World

XBOX Room

2:00 Try the XBOX 360!

Virtual Theater

2:00 VR Show: Interactive VR Art Exhibit.

COLOSSEO THEATER

5:45

SPECIAL EVENT IN COLLABORATION WITH "GIOVEDÌ SCIENZA"

Love and Other Special Effects. From the Magic of the Couple to Cinema and Internet

Piero Angela Writer and Journalist, creator of the television science program *Quark*, **Gabriele Cipollitti** Director of the television science series *Speciali di Superquark*, **Flavia Sparacino** Founder of the interactive design company *Sensing Places* and Researcher at the MIT-Massachusetts Institute of Technology Media Lab

Chairs Piero Bianucci Director of *TuttoScienze*, science weekly of the "La Stampa" newspaper.

Starting from his latest novel, dedicated to that extraordinary "special effect" called love, *Superquark's* author explains why evolution invented sex, what relation love holds with sex and sexual reproduction, and what makes people fall in love. With his director's help, Piero Angela shows the backstage of the most important and popular Italian TV program. A surprise conclusion will show a special effect about love designed by Boston's Massachusetts Institute of Technology (MIT) MediaLab. Two very recent technologies will be showcased: ***City of News***, a 3D browser which gives the opportunity to meet on the web with a telepresence from remote places, and the wearable computer ***Museum Wearable***, an augmented reality interactive tool designed as an individual audiovisual media for museum visitors, which can be used as a future instrument to identify spiritual affinities and to find the twin soul.

Giovedì Scienza is organized by Extramuseum, coordinated by Pino Zappalà



FRIDAY, NOVEMBER 4th

morning

TORINO INCONTRA CONVENTION CENTER

Cavour Hall

9:00

INVITED TALK

ANIMATION AND VISUAL EFFECTS SESSION II

Pixar Animation Studio's Production Pipeline and Integration of Third-Party Applications

With **Michael Shantzis** Graphics Software Engineer Pixar Animation Studios, Academy Award winner.

Academy Award winner in 1991, achieving scientific and engineering goals for CAPS, the digital *ink & paint* system developed in collaboration with Disney, Michael Shantzis talks about the increasingly frequent use of this software in the creation process of animation features, and about its complex management and integration of new packages into the studios' production environments.

Followed by presentations by **Rania Khairy** Assistant Lecturer in Computer and Information College, Assuit University, Egypt, **Carlo Alfano** Animation Director Lumiq Studios, **Gianluca Dentici** Supervisor Videa Visual Effects and **Fabio Interlenghi**, Technical Director and DMCube Product Manager for Omicron Group
Chair **Vincenzo Lombardo** Professor from the University of Turin, MULTIDAMS

11:45

INVITED TALK

From Special Effects to Reality, from Movies to Interactive Narrative Spaces: the Illusion Comes True

With **Flavia Sparacino** Founder of the interactive design company *Sensing Places* and Researcher at the MIT-Massachusetts Institute of Technology Media Lab

Nicholas Negroponte's dearest student will talk about the technological advances that have occurred in the last ten years in the field of digital imagery, and will illustrate the inventions, the result of her most recent researches, presenting in particular the interactive holographic television, its world première with a demonstration for the audience. Created through an expHand combination, also known as Minority Report Interface – a last generation installation allowing one to surf a 3D space using just hands – with a 3D holographic screen, the new television, which has a diverse array of potential applications, is considered one of the most innovative products in the area of future technology.

Giolitti Hall

9:00

MIMOS. Virtual Reality and Medicine

11:10

MIMOS. The Artificial Subject: Simulation and Construction of an Artificial Mind



Einaudi Hall

- 9:00 **Siggraph Reloaded**
Virtuality's Collection. Video Art from the World

XBOX Room

- 9:00 **Try the XBOX 360!**

Virtual Theater

- 9:00 **VR Show: Interactive VR Art Exhibit.**

afternoon

TORINO INCONTRA CONVENTION CENTER

Cavour Hall

- 2:00 **ARCHITECTURE AND COMPUTER GRAPHICS**
Kim Baumann Larsen Architect, Director of the Norwegian 3D design company Placebo Effects,
Stefano Boeri Architect and Urban Designer, Director of "Domus" magazine, **Benedetto Camerana** Architect, Member of the Scientific Committee IED-Istituto Europeo di Design and Director of the Camerana & Partners design company, **Maurizio Cilli** Architect
Chair Paolo Verri Director of Torino Internazionale
 Four experts working on different aspects of Virtual Architecture: Kim Baumann Larsen, Placebo Effects' CEO – the Norwegian company producing 3D special effects for architectural projects – Stefano Boeri, director of "Domus" magazine, who will talk about globalization and investigate everyday spaces; Benedetto Camerana, coordinator of the Olympic village's project, the most important work achieved for Turin's Olympics 2006; Maurizio Cilli, author of "The beach" project, the metropolitan beach in Turin at Po's embankments and coordinator of the glocalmap.to workgroup, planned for Turin's Culture Olympics 2006.
- 4:15 **FROM CINEMA TO AUTOMOTIVE DESIGN**
 With designers from leading automotive design companies: **Autostudi, Bertone, Carcerano, Fiat-Centro Stile, Fioravanti, Idea Institute, Italdesign (EdenLab), Pininfarina, Stola, Tesco TS**
Chair Lorenza Pininfarina Member of the board of directors of Pininfarina S.p.A and President of the Gruppo Carrozzeri Italiani ANFIA
 Presentation of images and videoclips focusing on the role of 3D - advanced computer graphics, virtual reality and rendering in the automotive industry. Emphasis will be put not only on the design aspect, giving a particular relevance to new technologies that are fundamental for coachbuilders, but also on the products' promotion.



6:45

TRIBUTE TO

Bruno Bozzetto Author, Director and Producer of animation movies
 Introduced by **Dino Aloï** Cartoonist and Illustrator

One of the fathers of Italian animation will talk about his works, his glorious “studio”, his new activity as a free lancer, and the new technologies that fascinate him, such as 3D, which he is experiencing with a team of young and talented artists. Devoted above all to creativity, the director is completing, together with Massimo Carrier Ragazzi’s “Maga” Studio, a TV series for children created entirely in 3D.

Giolitti Hall

2:00 **MIMOS. Virtual Reality and Crime Repression**

2:50 **MIMOS. Simulation in Integrated Design**

Einaudi Hall

2:00 **Siggraph Reloaded**

Virtuality’s Collection. Video Art from the World

XBOX Room

2:00 **Try the XBOX 360!**

Virtual Theater

2:00 **VR Show: Interactive VR Art Exhibit.**

evening

HIROSHIMA MON AMOUR

Start 10:30

DIGITAL DELIRIUM

Project coordinated by the Video Artist **Alessandro Amaducci**

In a dizzying live mix, digital images created by artists and experts active in Turin and works selected from the most interesting screenings at Virtuality Conference will be video-projected on many different screens and accompanied by a selection of electronic music by dj and singer MGZ. The show’s theme is digital madness colliding into the world of moving images: 3D and 2D visualizations, but also post-production, compositing and a lot of other techniques. For watching and dancing all night ...

SATURDAY, NOVEMBER 5th

morning

TORINO INCONTRA CONVENTION CENTER

Cavour Hall

9:00

INVITED TALK***The making of MADAGASCAR*****Luca Prasso** Senior Character Technical Director PDI/DreamWorks, Academy Award winner

Senior Character Technical Supervisor at PDI DreamWorks, and part of the technical cast of **Shrek** (Academy Award winner for best animation feature in 2001), Luca Prasso discusses his latest labour, **Madagascar**, which required the overcoming of many technical, creative and artistic challenges. What we see on the screen is the result of the work of 300 people, which lasted more than three years, besides the intervention of four psychotic penguins...

Followed by

PORTFOLIO EXHIBIT REVIEW LIVE

Portfolio Exhibit Review Live is the chance for any video director to expose his/her work to the comments of Academy Award winner Luca Prasso of PDI/Dreamworks. Each participant, whose submission was selected from all the works sent to Virtuality Conference, will have the unique opportunity to be part of the **Portfolio Exhibit Review Live** and to show a 2 minute reel of his/her work and Luca Prasso will comment in the next 2 minutes. In a maximum time of 5 minutes it will be the next candidate's turn. No prizes, just the satisfaction of the discussion with experts and the public.

10:45

INVITED TALK***Future Media: Hopes, Possibilities, Limits*****Ted Nelson** *Visiting Professor* at Oxford University, Philosopher of Computer Science, Creator of Hypertext

Followed by presentations by **Joseph Conte** Professor of American Literature and Postmodern Theory at SUNY Buffalo, **Carlo Infante** Professor of Performing Media at Lecce University, at the Accademia di Belle Arti di Macerata and at Istituto Europeo di Design di Torino

Giolitti Hall

8:45

MIMOS. Virtual Reality and Cultural Heritage**Einaudi Hall**

9:00

Siggraph Reloaded**Virtuality's Collection. Video Art from the World**



XBOX Room

9:00 Try the XBOX 360!

Virtual Theater

9:00 VR Show: Interactive VR Art Exhibit.

afternoon

TORINO INCONTRA CONVENTION CENTER

Cavour Hall

2:00 ***VIRTUALITY 2005 INTERNATIONAL STUDENT PRIZE***

Award ceremony for the winners of the Worldwide Competition for Best Short Digital Video made by using Visual Effects and/or 3D Animation. Screening of the award-winning works.

3:00

TRIBUTE TO

Dante Ferretti Scenographer for cinema and theatre, Academy Award winner

Introduced by **Alberto Barbera** Director of the National Museum of Cinema

The Italian scenographer will trace the stages of his career crowned, in 2004, with an Academy Award for *The Aviator*: from his long-time collaboration with Pasolini, to the David di Donatello won for *The Name of the Rose* (1986), to his Hollywood debut with Martin Scorsese, to many features (*The Age of Innocence* in 1993, *Casino* in 1995, *Kundun* in 1997, *Gangs of New York* in 2002) leading up, year after year, to his international consecration, with the successful collaboration of his wife Francesca Lo Schiavo as interior designer.

4:30

FASHION, DESIGN AND CINEMA

With **Marina Garzoni** Fashion Expert, Creator of the "Fashion and Technology" talkshow,

Gabriella Pescucci Costume Designer, Academy Award winner, **Javier Reyes** Founder and Director of R&D Reyes Infografica Madrid.

Chair **Flavia Sparacino**, Founder of the interactive design company *Sensing Places* and Researcher at the MIT-Massachusetts Institute of Technology Media Lab

A virtual fashion show will introduce the presentation of *Virtual Fashion Works*, the first and only fashion design software system allowing one to create simulated clothes, produced by the Madrid based company Reyes Infográfica. At the same time, set design and spatial "special effects" and new *body tracking* (*motion capture* without any kind of marker use) techniques will be showcased: drawn up first by MIT's MediaLab and then by Sensing Places, they have the potential to revolutionize both the presentation of clothing products to the public and the shopping experience. During this panel, the 3D Open Fashion Design Contest, promoted internationally by Reyes Infográfica in collaboration with the Italian National Chamber of Fashion, will be announced.



Einaudi Hall

2:00 **Siggraph Reloaded**
Virtuality's Collection. Video Art from the World

XBOX Room

2:00 **Try the XBOX 360!**

Virtual Theater

2:00 **VR Show: Interactive VR Art Exhibit**

SUNDAY, NOVEMBER 6th

TORINO INCONTRA CONVENTION CENTER

Cavour Hall

12:45 **VIRTHUALIS**
Presentation of the *Virthualis* European Project, aiming to develop the technological standard which allows for the reduction of the percentage of "human mistakes" in the industrial sector.

1:15/2:00 **VIRTUAL THEATER**
With **Carlo Infante**, Theoretician and Professor of Performing Media at Lecce University,
Antonio Pizzo Professor at DAMS, Torino University.

XBOX Room

2:00 **Try the XBOX 360!**



Virtual Theater

2:00 VR Show: Interactive VR Art Exhibit

Cavour Hall

- 2:00 **VIRTUAL THEATER**
The new perspectives of scenic art in the light of the Virtual Reality Technologies
With **Franz Fischnaller**, Chief designer, Production and Project Manager F.A.B.R.I.CATORS, Italia, **Bino & Cool** Virtual Reality Artists, **Hans Hauska** Senior Lecturer at the Stockholm Royal Institute of Technology, **Torbjorn Johansson** IT Coordinator at Umeå University, **Jackie Matisse** Artist, **Agueda Simó**, Visiting Professor at the University of Beira Interior Chair **Josephine Anstey**, Professor at SUNY at Buffalo
- 4:00 **NEXT GEN CONSOLE**
With **Fabrizio Vagliasindi** Strategic Consultant of Direction of Leader and Professor of Digital Entertainment Design at IULM, Milan, **Roberto Marino** Professor of Interactive Design at Nuova Accademia delle Belle Arti, Milan, **Federico Rampolla** Strategic Consultant of WPP Group, **Mauro Dapit** CEO of Videogame, **Massimiliano Catanzaro**, Project Manager of Mediaset Televisione digitale terrestre
With XBOX 360, commercially released by Christmas and showcased in its Italian première at Virtuality Conference, we enter the so called Next Gen Console era. But what does it mean having *consumer* machines provided with extreme technology and power to “play videogames” in our lounges? Perhaps, it means that we should reconsider this word, limited and obsolete, in order to move towards a dimension more related to cinema than to what we could consider the new digital cinema, and that we are on the threshold of another technological evolution (or revolution). These topics will be discussed in this session dedicated to those who want to play and to those who want to make the people play. But is “play” still the correct word?
- 4:45 *The role of the ludic video editors associations in Italy and Europe*
With **Thalita Malagò** Secretary General of AESVI – Italian Ludic Video Editors Association
- 5:00 *Next Gen Console: online multiplayer technology and potential*
With **Evita Barra** Marketing Manager Xbox & games of the Home Entertainment Division of Microsoft Italia
- 5:20 *Next Gen Console: design and creativity: how interactive projects of the new generation are designed and realized in Italy*
With **Antonio Farina** President of Milestone
- 5:40 *Cinema and Video Games*
With **Michael Jones** Education Officer in Digital Media Services at Powerhouse Museum, Sidney



6:00

INVITED TALK

Next Generation game graphics of Need for Speed Most Wanted on the Xbox 360

Habib Zargarpour Senior Art Director for Electronics Arts Canada, twice nominated for the Oscars

A graphic artist and special effects wizard (he obtained two Academy Award nominations, for *Twister* and *The Perfect Storm*), Habib Zargarpour has worked for more than 12 years at George Lucas's *Industrial Light & Magic* (ILM). Besides his activity in cinema he is currently working, with great success and excellent visual results, in the videogames field. At Virtuality he is going to present the Italian première of his latest project, *Need For Speed Most Wanted*, the next generation title for which he has been the artistic director.

Close of the Convention