

# Scientific Program

## **Monday 31st August**

8,30 – 9,45		<b>Registration</b>
9,45 – 11,15	<b>Tutorial 1</b> Stéphane Cotin INRIA – France	<i>Research, Prototyping, and Product Development of Medical Simulation Applications Using the SOFA Framework</i>
11,30 – 13,00	<b>Tutorial 2</b> Fabrizio Funtò Hyperreality Partner - Los Angeles, CA, USA	<i>Cultural Heritage Innovation Design: What Caught My Eye</i>
15,00 – 15,15		<b>Opening Session</b>
15,15 – 16,15	<b>Keynote Speech 1</b> Sofia Pescarin CNR ITABC, Italy	<i>Virtual Museums Interacting and Augmenting Cultural Heritage: an European Perspective</i>
16,15 – 16,00		coffee break
<b>Session 1 – Applications in Cultural Heritage</b> <i>Chair: Sofia Pescarin</i>		
	Francesco Gabellone	<i>Integrated Technologies for Museum Communication and Interactive Apps in the PON DiCet Projec</i>
	Raynel Mendoza, Danilo Vargas, Silvia Baldiris, Ramon Fabregat	<i>“Social Heritage” Augmented Reality Application to Heritage Education</i>
16,30 – 17,45	Roberto Pierdicca, Emanuele Frontoni, Primo Zingaretti, Eva Savina Malinverni, Francesca Colosi, Roberto Orazi	<i>“Making Visible the Invisible. Augmented Reality Visualization for 3D Reconstructions of Archaeological Sites</i>
	Roberto Pierdicca, Emanuele Frontoni, Primo Zingaretti, Mirco Sturari, Ramona Quattrini, Paolo Clini	<i>Advanced interaction with Paintings by Augmented Reality and High Resolution Visualization: a Real Case Exhibition</i>
	Pietro Vecchio, Francesca Mele, Lucio T. De Paolis, Italo Epicoco, Marco Mancini, Giovanni Aloisio	<i>Cloud Computing and Augmented Realty for Cultural Heritage</i>
18,30 – 20,30		Guided Visit of Lecce

## Tuesday 1st September

9,00 – 10,00	<p><b>Keynote Speech 2</b> Patrick Bourdot <i>CNRS/LIMSI, University of Paris-Sud, France</i></p>	<p><i>Collaborative Interactions within Immersive Environments: Advantages, Drawbacks and Current Research Issues on Multi-Stereoscopic CAVE-like Setups</i></p>
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### Session 2 – Augmented & Mixed Reality

*Chair: Patrick Bourdot*

10,00 – 11,00	<p>Stephane Cote, Antoine Girard-Vallee</p> <p>I Gede Mahendra Darmawiguna, I Made Gede Sunarya, Made Windu Antara Kesiman, Ketut Resika Arthana, Padma Nyoman Crisnapati, Eka Putra Widianara, Gede Agus Putra Yasa, Putu Putri Aryasih, Ni Made Desi Arisandi</p> <p>Nicolás Fernando Gazcón, Silvia Mabel Castro</p> <p>Anna Katharina Hebborn, Marius Erdt, Stefan Müller</p>	<p><i>Accurate on Site Georeferenced Subsurface Utility Model Visualisation</i></p> <p><i>The Augmented Reality Story Book Project: A Collection of Balinese Miths and Legends</i></p> <p><i>ARBS: An Interactive and Collaborative System for Augmented Reality Books</i></p> <p><i>Robust Model Based Tracking using Edge Mapping and Refinement</i></p>
11,00 – 11,15	coffee break	

### Session 3 – Augmented & Mixed Reality

*Chair: Lucio Tommaso De Paolis*

11,15 – 12,30	<p>Sara Invitto, Italo Spada, Lucio De Paolis</p> <p>Anna Katharina Hebborn, Milan Dilberovic, Adrian Derstroff, Andre Franke, Nils Höhner, Patrick Krechel, Lisa Prinz, Astrid Szirmai, Fabian Weigend, Stefan Müller</p> <p>Ali Samini, Karljohan Lundin Palmerius</p> <p>Bruno Simoes, Federico Prandi, Raffaele De Amicis</p> <p>Lakshmi Prabha Nattamai Sekar, Alexander Santos, Olga Beltramello</p>	<p><i>Augmented Reality, Embodied Cognition and Learning</i></p> <p><i>OscARsWelt: A Collaborative Augmented Reality Game</i></p> <p><i>Device Registration for 3D Geometry-based User-Perspective Rendering in Hand-Held Video See-Through Augmented Reality</i></p> <p><i>Creativity Support in Projection-based Augmented Environments</i></p> <p><i>IMU Drift reduction for Augmented Reality Applications</i></p>
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## ***Tuesday 1st September***

### ***Keynote Speech 3***

15,00 – 16,00	Luigi Gallo <i>Institute for High Performance Computing and Networking (ICAR-CNR), Italy</i>	<i>Touchless Interaction in Surgery: the Medical Imaging Toolkit Experience</i>
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16,00 – 16,15 coffee break

### **Session 4 – Applications in Medicine**

*Chair: Luigi Gallo*

16,15 – 17,30	Stephane Claude Gobron, Nicolas Zannini, Nicolas Wenk, Carl Schmitt, Yannick Charrotton, Aurélien Fauquex, Michel Lauria, Francis Degache, Rolf Frischknecht	<i>Serious games for rehabilitation using head-mounted display and haptic device</i>
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16,15 – 17,30	Cristian Lorenzini, Claudia Faita, Camilla Tanca, Marcello Carrozzino, Franco Tecchia, Massimo Bergamasco	<i>VR-based Serious Game Designed for Medical Ethics Training</i>
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16,15 – 17,30	Francesco Ricciardi, Emiliano Pastorelli, Lucio Tommaso De Paolis, Heiko Herrmann	<i>Scalable Medical Viewer for Virtual Reality Environments</i>
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16,15 – 17,30	Francesco Ricciardi, Chiara Copelli, Lucio Tommaso De Paolis	<i>A Pre-Operative Planning Module for an Augmented Reality Application in Maxillo-Facial Surgery</i>
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16,15 – 17,30	Adrian Schneider, Peter Thalmann, Simon Pezold, Simone Hieber, Philippe Claude Cattin	<i>Augmented Reality Assisted Brain Tumor Extraction in Mice</i>
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20,00 – 23,00 Gala Dinner

## Wednesday 2nd September

### Keynote Speech 4

9,00 – 10,00

Monica Bordegoni  
Politecnico di Milano,  
Italy

*How Touch and Smell Enhance the Realism of our  
Virtual Experiences*

### Session 5 – Applications in Industry and Robotics

Chair: Monica Bordegoni

Víctor H. Andaluz, Jessica  
S. Ortiz, Jorge S. Sánchez

*Bilateral Control of a Robotic Arm through Brain  
Signals*

Francesco Argese,  
Andrea Martini, Lucio  
Colizzi, Marco Fina,  
Fiorenzo Ambrosino,  
Pasquale Bene, Leonardo  
Cosma, Giovanni Reo

*A Virtual Prototyping Platform to Improve CAE  
Analysis Workflow*

10,00 – 11,00

Francesco Chionna, Piero  
Cirillo, Vito Palmieri,  
Mauro Bellone

*A Proposed Hardware-Software Architecture for  
Virtual Reality in Industrial Applications*

Marwene Kechiche,  
Mohamed Amine Abidi,  
Patrick Baert, Rosario  
Toscano

*Using Haptic Forces Feedback for Immersive and  
Interactive Simulation in industrial Context*

11,00 – 11,15

coffee break

### Session 6 – Applications in Industry and Robotics

Chair: Monica Bordegoni

Federico Manuri

*A Flexible AR-based Training System for Industrial  
Maintenance*

Daniele Sportillo,  
Giovanni Avveduto,  
Franco Tecchia, Marcello  
Carrozzino

*Training in VR: a Preliminary Study on Learning  
Assembly/Disassembly Sequences*

11,15 – 12,00

Kostas Kontakis, Malvina  
Steiakaki, Michael  
Kalochristianakis, Kostas  
Kapetanakis, Athanasios  
Malamos

*Applying Aesthetic Rules in Virtual Environments  
by Means of Semantic Web Technologies*

## Wednesday 2nd September

### Session 7 – Poster Presentations

Chair: Antonio Mongelli

Giorgio Bernabei, Angelo  
Corallo, Roberto  
Lombardo, Simone Maci,  
Valerio Galli, Antonio  
Notaro, Danilo  
Cannoletta

*Development of a framework to support Virtual  
Review within complex-product lifecycle  
management*

Yevgeniya Daineko

*3D Physics Virtual Laboratory as a Teaching  
Platform*

Ugo Erra, Valerio  
Colonnese

*Experiences in Development of an Augmented  
Reality Dressing Room*

12,00 – 12,45

Asylgul Gabdullina,  
Anuar Zhukeshov, Assem  
Amrenova, Zhandos  
Moldabekov, Anar  
Kusyman, Mira  
Amirkozhanova, Tannur  
Bakytказы, Kuantay  
Fermakhan, Argynbek  
Kaibar, Kaster Serik

*Development of a Virtual laboratory for  
investigating the interaction of materials with  
plasma*

Lucian Ilea, Catalin  
Boanta, Cornel Brisan

*Aspects Concerning Algorithms of VRML  
Surfaces' Generation*

Tobias Müller

*Towards a Framework for Information  
Presentation in Augmented Reality for the  
Support of Procedural Tasks*

Siheem Ben Jouida,  
Saoussen Krichen

*A Dynamic-Oriented Decision Support System for  
group Interview Knapsack Problem*

Carlo Vizzi

*Virtual Reality as Cross-Domain Language in  
Collaborative Environments*

## Wednesday 2nd September

### Session 8 – Interfaces

Chair: Lucio Tommaso De Paolis

Konstantinos Cornelis  
Apostolakis, Petros Daras

*Natural User Interfaces for Virtual Character Full Body and Facial Animation in Immersive Virtual Worlds*

Raffaello Brondi,  
Marcello Carrozzino

*ARTworks: an Augmented Reality Interface as an Aid for Restoration Professionals*

Giuseppe Caggianese,  
Luigi Gallo, Pietro Neroni

*Design and Preliminary Evaluation of Free-Hand Travel Techniques for Wearable Immersive Virtual Reality Systems with Egocentric Sensing*

14,45 – 16,15

Claudia Faita, Federico  
Vanni, Cristian Lorenzin,  
Marcello Carrozzino,  
Massimo Bergamasco

*Perception of Basic Emotions from Facial Expressions of Dynamic Virtual Avatars*

Zulqarnain Rashid

*Bridging Offline and Online World through Augmentable Smart Glass Interfaces*

Alessandro Zocco,  
Matteo Damiano Zocco,  
Antonella Greco,  
Salvatore Livatino, Lucio  
Tommaso De Paolis

*Touchless Interaction for Command and Control in Military Operations*

16,15 – 16,30

coffee break

16,30 – 17,00

**Poster Session**

17,00 – 17,15

**Closing Session**