

CALL for PAPER

The 2nd Workshop on 3D Modeling & BIM 2016 'Applications and possible future developments' will take place in Rome on 21st and 22nd April 2016. The workshop will be organized by the Laboratory of Visual and Digital Studies in Architecture of the Department of History, Representation and Restoration of Architecture with the Faculty of Architecture - Sapienza University of Rome. It will be a forum to gather national and international opinions and research, professional and training contributions on 3D modeling and BIM. For this reason, it is addressed to academics, professionals, technicians, teachers and students, with different registration fees (as detailed in the Registration Section) and university and/or professional training credits.

Workshop Objectives

Starting from the most advanced experience in the field of modeling (ranging from checking the geometric shape to visual aspects up to the management of a whole set of information and data), the workshop is addressed to academics, professionals and operators. It will be an opportunity to discuss possible applications and future developments as seen from different perspectives; these latter include architecture and design project control, management of architectural and construction heritage, documentation for dissemination and knowledge.

In particular, the Workshop will dwell on the most advanced and effective methods, procedures and instruments of 3D Modeling and Building Information Modeling (BIM) in strategic fields, ranging from the control of project sustainability to the enjoyment and enhancement of cultural heritage.

Attention will also be paid to applications and scientific research in the field of 3D modeling and BIM.

According to this perspective, the first part of the Workshop will focus on three-dimensional modeling, management of images (static and dynamic) in post-production as well, on the use of 3D printers, generation of augmented reality experiences and virtual and immersive spaces. These procedures allow controlling, understanding, viewing and enjoying both the design process and the construction and cultural heritage.

The second part of the workshop will focus on B.I.M. (Building Information Modeling), as a visual, although logical and informative asset; here, the designer is placed at the center of the design and construction process on both a small, medium and large scale. In recent years, in fact, the entire process (from the development of an idea to testing the finished product) has been gradually enriched with several different segments controlled by different subjects; this made their coordination complex and often ineffective, slowing down the whole process with a considerable cost increase. Thanks to the technological resource B.I.M., the visual-informative model enables the designer to play a central role in this process. Procedures become simplified, cross-iterations are immediate and the project is structured from the very beginning in a flexible way, to make sure the initial ideas (also as they develop) are respected and their implementation is fully controlled. The objective of the Workshop is to introduce the B.I.M platform with all the possibilities that it offers and illustrate how to relate with this new philosophy of organizing the representation in order to manage the project.

Main topics

Digitization and data Acquisition

Photogrammetry & image-based modeling
3D scanning & digitization (laser, structured light, motion capture, etc.)

Computer Graphics and 3D Modeling

3D modeling (CAD-based and reality-based)
Real + virtual worlds (mixed/augmented reality)
Virtualization of other senses (touch, taste, smell, sound)
Haptic & Multimodal interaction
Local/remote rendering
Innovative interaction systems
Tools for Storytelling and Serious Games
Tools for multimedia or museums installations
Visual simulation of materials
Emerging visualization technologies
Responsive architecture
Visualization and communication
Digital Heritage
3D Printing
Virtual Reconstruction Issues
Use of interactive models

Building Information Modeling

BIM and building
BIM and cultural heritage
BIM and restoration

Deadlines

December 28th 2015 – opening of call for paper

February 15th 2016 – submission of full papers

March 1st 2016 – notification of acceptance and registration opening

March 21st 2016 – submission of corrected papers

March 21st 2016 – deadline for early registration (reduced fee)

April 13rd 2016 – final program

April 21st 2016 – Symposium (Conference Session)

April 22nd 2016 – (morning) Symposium (Conference Session)

April 22nd 2016 – (afternoon) Tutorial Session

Submission

1. Papers must be in English and Italian. The text must not exceed 15,000 characters and include an abstract of a length not exceeding 300 characters; it can be accompanied by images (maximum 10 pictures). The editing rules to submit papers are available on the website www.3d-modeling.it
2. Papers will be subjected to a process of review and evaluation in a double-blind peer review fashion.
3. Accepted papers, having regularly paid the registration fee, will be published in the Proceedings published by "Sapienza Università Editrice".
4. The best papers will be presented during the Symposium (Conference Session). Each presentation will last 20 minutes. Papers accepted but not selected for the Symposium will be included in the Poster section.
5. Papers deemed to be particularly worthy will also be published in the magazine "XY Digitale" (<http://www.xydigitale.it/>).
6. Papers should be sent to the following email address: submission@3d-modeling.it

Registration

For those submitting a paper but not entitled to a free registration as illustrated above:

Early bird registration from 1st march to 21st March 2016

100 Euro *

Regular registration from 22nd march to 13rd April 2016

150 Euro*

Late registration from 14th April to 21st April 2016

200 Euro*

Professors, Students of the Faculty of Architecture, Sapienza University of Rome

free

Architects OAR (Ordine Architetti P.P.C. di Roma e Provincia)

free

Engineers OIR (Ordine Ingegneri di Roma)

free

* + Vat, if applicable



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Organizing Committee (Sapienza University of Rome)

Tommaso Empler (*Director*)
Fabio Quici (*Scientific Coordinator*)
Ivan Paduano (*Coordinator Organization*)
Carlo Bianchini
Michele Calvano
Marco Carpiceci
Andrea Casale
Emanuela Chiavoni
Laura De Carlo
Carlo Inglese
Elena Ippoliti
Alfonso Ippolito
Leonardo Paris
Graziano Mario Valenti

Scientific Committee

Carlo Bianchini, *Sapienza University of Rome (Italy)*
Davide Borra, *NoReal (Italy)*
Paolo Capizzi, *Udine 3D Forum (Italy)*
Roberto de Rubertis, *XY Digitale (Italy)*
Dimitar Dinev, *3DWS (Bulgaria)*
Tommaso Empler, *Sapienza University of Rome (Italy)*
Elena Ippoliti, *Sapienza University of Rome (Italy)*
Massimiliano Lo Turco, *Politecnico of Turin (Italy)*
Jean Pierre Monclin, *moka-studio architectural visualisation (Germany)*
Anna Moreno, *ENEA (Italy)*
Luca Nardone, *Udine 3D Forum (Italy)*
Vittorio Frego, *RisorseCad-BIM Solution Expert (Italy)*
Giovanna Massari, *University of Trento (Italy)*
Ivan Paduano, *Sapienza University of Rome (Italy)*
Leonardo Paris, *Sapienza University of Rome (Italy)*
Fabio Quici, *Sapienza University of Rome (Italy)*
Manuel Ròdenas, *UPCT Universidad Politécnica de Cartagena (Spain)*
Michela Rossi, *Politecnico di Milano (Italy)*
Alberto Sdegno, *University of Trieste (Italy)*
Dionissios Tsangaropoulos, *Delta Tracing (Greece)*
Graziano Mario Valenti, *Sapienza University of Rome (Italy)*



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Workshop Venue

SAPIENZA University of Rome

Facoltà di Architettura - Sede di Valle Giulia
Via Antonio Gramsci 53, 00197 Roma

Founded in 1920 as the first School of Architecture in Italy, it became part of the University "La Sapienza" as a Faculty in 1935. The building has a U-shaped plant, created by the master of modern architecture Enrico Del Debbio; it rises on a suggestive slope between Villa Borghese and the hill of Parioli neighborhood. Characterized by a base in travertine and a Pompeian red coating, the south face of the building still shows Renato Guttuso's graffiti, made during the period of youth protest at the end of the sixties.

Workshop 2015

The first edition of the Workshop "3D Modeling & BIM" was held in 2015, at the Faculty of Architecture of Sapienza University of Rome, as "Udine 3D Rome Edition. 3D modeling and BIM". On 8th and 9th May, approximately 400 participants, including academics, professionals, teachers and students were in attendance, as described below:

Morning of 8th May, "Main Event" on 3D Modeling: 3D modeling between project and relief (speaker, Tommaso Empler), From project to 3D printing (speaker, Stefano Capezzone), The 3d frontiers of digital effects (speaker, Joseph Lefevre), Special effects yesterday and today (speaker Sergio Stivaletti);

Afternoon: 3 workshops, arranged as follows:

- Architecture and Design, divided into: The Communication of the Cultural Heritage (speakers: Leonardo Paris and Tommaso Empler), Parametric customization and prototyping. From the creation to a bespoke product (speakers: Calvano Michele and Matteo Flavio Mancini);
- Graphics and animation section, divided into: The new frontiers of 3D Animation (speaker: Carmine Canino), Digital compositing and fx (speakers: Victor Perez and Joseph Lefebvre), From the idea to the drawn project to photorealistic rendering (speaker: Antonio De Lorenzo);
- Engineering and prototyping section: 3Dracers: how to create your remotely controlled car with 3D printing and Arduino (speaker, Marco D'Alia), Self-production and design (speaker, Silvio Tassinari).

The morning of 9th May was dedicated to BIM: BIM and sustainability (speaker, Anna Moreno), About BIM (speaker, Vittorio Frego), Spliced woods, BIM, Architecture (speaker, Felice Ragazzo).

Further informations

web: www.3d-modeling.it

mail: info@3d-modeling.it

