

Grotto Digital Twins:

Strategies for Documentation,
Preservation, and Promotion.

17th February 2025

online seminar - [Zoom meeting link](#)

Italy - 10:00 - 13:00 (CET)

China - 17:00 - 20:00 (CST)



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10:00 - 10:10 (CET) / 17:00 - 17:10 (CST) – 10 min

Opening and introduction

Fulvio Rinaudo, President - CIPA Heritage Documentation
Hou Miaole, Beijing University of Civil Engineering and Architecture
Grazia Tucci, Università degli Studi di Firenze

10:10 - 10:30 (CET) / 17:10 - 17:30 (CST) – 20 min

Laboratorio GeCo – Università degli Studi di Firenze

3D Documentation of Grottos: Steps Towards Digital Twin Creation

Speakers: Grazia Tucci, Alessandro Conti, Lidia Fiorini

10:30 - 11:10 (CET) / 17:30 - 18:10 (CST) – 40 min

Istituto Centrale per il Restauro (ICR)

The Restoration of Mural Paintings in Hypogean

Environments: Insights from the Experiences of the ICR

Speakers: Sara lafrate, Giorgio Sobrà, Manuel Di Giandomenico

Strategies for the Conservation of Sichuan's Sandstone

Sculptural Complexes: Objectives of the International

Cooperation Project between the Central Institute for

Restoration and the Sichuan Department of Cultural Heritage

Speakers: Eleonora Gioventù, Natalie Iacopino

11:10 - 11:30 (CET) / 18:10 - 19:30 (CST) – 20 min

Beijing University of Civil Engineering and Architecture

Virtual Restoration of Cultural Heritage

Speaker: Hou Miaole

11:30 - 11:50 (CET) / 18:30 - 18:50 (CST) – 20 min

Università Politecnica delle Marche

Geomatics for the Valorization and Knowledge of

Underground Built Heritage: between 3D Surveying and

Multimedia Experiences to Share Science and Culture in a

Virtual Museum

Speakers: Eva Savina Malinverni, Roberto Pierdicca, Francesco Di Stefano

11:50 - 12:10 (CET) / 18:50 - 19:10 (CST) – 20 min

Norwegian University of Science and Technology

CityGML for 3D Modelling of Cultural Heritage

Speaker: Fan Hongchao

12:10 - 12:30 (CET) / 19:10 - 19:30 (CST) – 20 min

Consiglio Nazionale delle Ricerche (CNR)

Diagnostic and monitoring strategies for the conservation in

of semi-confined environments towards a DT integration

Speakers: Marta Castellini, Emma Cantisani, Rachele Manganelli Del Fà

12:30 - 12:50 (CET) / 19:30 - 19:50 (CST) – 20 min

Università degli Studi di Cassino, DTC Lazio

The Ponari Nymphaeum of Cassino: Distinctive Features and

Critical Issues

Speakers: Eugenio Polito, Arturo Gallozzi, Vincenzo Graffeo, Francesca Pierdominici

12:50 - 13:00 (CET) / 19:50 - 20:00 (CST) – 10 min

Discussion and greetings