

SECOND INTERNATIONAL WORKSHOP ON ABRUZZO'S HISTORICAL HERITAGE CASTEL DI SANGRO AND SCONTRONE: TECHNOLOGIES AND DESIGN

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ABSTRACT

From 19 to 27 July 2025, the 2nd International Workshop on Abruzzo's Historical Heritage, dedicated to Castel di Sangro and Scontrone: technologies and design, served as an advanced forum for discussing the relationships between architectural composition, building technologies, and digital tools for the knowledge of historical heritage.

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Figure 1. Scontrone. View from the Valley.

From 19 to 27 July 2025, the 2nd International Workshop on Abruzzo's Historical Heritage, dedicated to Castel di Sangro and Scontrone: technologies and design, served as an advanced forum for discussing the relationships between architectural composition, building technologies, and digital tools for the knowledge of historical heritage. Hosted at the Museo Civico Aufidenate – formerly the Convent of Santa Maria Maddalena – in Castel di Sangro, the second edition of the initiative was part of the research programme on Sustainable Strategies for Heritage, aimed at testing the effectiveness of integrated models of analysis, representation, and design.

Coordinated by Alessandro Camiz and Daniela Ladiana (Università degli Studi “G. d’Annunzio”), Burak Asiliskender (Abdullah Gül Üniversitesi) and Mario Rainaldi (Museo Civico Aufidenate), the workshop brought together scholars, researchers, and professionals from several Italian and international institutions.

The activities were carried out by faculty members of the Università “Gabriele d’Annunzio” of Chieti–Pescara and of the PhD Programme “Culture del Progetto: Creatività, Patrimonio, Ambiente”, in collaboration with Abdullah Gül University, Politecnico di Torino, Università di Padova, University of Málaga, and the Pinacoteca Patiniana.

Interdisciplinarity was not conceived as a merely additive strategy but as a means to construct a shared operational en-



Figure 2. Civic Museum Aufidenate. Convent of Santa Maria Maddalena, Castel di Sangro.

Figure 3. Palazzo de Petra,
Castel di Sangro.



vironment in which the relationships between historical-heritage interpretation, digital representation, and sustainable design strategies could be critically verified.

The opening conference, held on 21 July, outlined the principal theoretical axes of the programme.

The morning session, Memory and Sustainable Models for Cultural Heritage, chaired by Prof. Alessandro Camiz, examined the dialectic between heritage conservation and architectural design through the lens of recent advances in digital surveying, with particular attention to multi-source acquisition processes and the construction of high-density three-dimensional models. A reading of an excerpt from “A Winter in Abruzzo” by Bianca Levi Zagari introduced a reflection on the immaterial dimensions of the landscape and their relevance for the construction of memory-orientated design scenarios.

The session concluded with the presentation of the volume “Castel di Sangro: Tecnologie e Progetti”, edited by Alessandro Camiz, Daniela Ladiana, Mario Rainaldi, and Giorgio Verdiani – a synthesis of the first edition of the international workshop – highlighting how surveying, typomorphological analysis, and digital modelling now constitute a methodological repertoire capable of guiding calibrated and integrated interventions in minor historic centres.

The afternoon session, Digital Twins and Advanced Sustainable Technologies for Cultural Heritage, coordinated by Prof. Daniela Ladiana, explored the innovative role of Digital

Figure 4. Poster of the
workshop.



Twins as tools for integrating survey, modelling, and design. The case study of the Pietro Piffetti Library, together with applications developed for the Museo Aufidenate, demonstrated the potential of HBIM-based workflows, multispectral photogrammetry, and laser scanning for producing models that integrate morphological, material, and environmental data. Additional contributions addressed methodological aspects related to the knowledge and monitoring of historic centres, discussing strategies grounded in the integrated modelling of settlement systems, the semantic ontology of fortified architectures, and the use of digital tools for the management of complex heritage systems such as fortifications.

Taken together, these studies outlined a broad national and international methodological framework in which architectural design operates as a mediation between technological-environmental and structural performance requirements and conservation-orientated demands.

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Figure 5. Poster of the conference.