Session

Title**: Heritage Building Information Modeling (HBIM) - Preservation through digitization**

Description**:**

The 60th anniversary of the Charter of Venice prompts a critical reflection on the challenges facing the preservation and documentation of cultural heritage in the digital era. Historical assets, threatened by climate change, war, and other perils, necessitate innovative approaches to ensure their safeguarding for future generations. Building Information Modeling (BIM), under the ISO 19650 standard, emerges as a powerful tool for addressing these challenges, offering opportunities for the interoperable and sustainable digital 3D representation of built cultural heritage.

This session at the international conference "New Technologies and Cultural Heritage" explores the impact of BIM in the preservation through digitalization of built cultural heritage. We invite contributions that delve into the standardization of 3D data sets within the context of historic BIM implementation. Topics of interest include case studies demonstrating the successful application of BIM in heritage preservation, methodologies for acquiring and modeling historical data, innovative approaches to documentation and conservation using BIM, and discussions on ethical and legal considerations in digitizing cultural heritage. Additionally, research focusing on the integration of BIM with other digital technologies, such as laser scanning and photogrammetry, for enhanced visualization and interpretation of historical assets is encouraged.

Motivation:

A couple of possible topics of relevance within the implementation of historic Building Information Modeling in the cultural heritage sector include the development of comprehensive BIM databases for historic buildings, enabling detailed analysis and conservation planning, and the exploration of augmented reality applications for immersive experiences of cultural heritage sites.

Target Audience:

This session aims to foster interdisciplinary dialogue and collaboration among conservators, stakeholders, architects, building researchers, archaeologists, and art historians. By bringing together diverse perspectives and expertise, we aim to advance our understanding of the potential of BIM in the cultural heritage sector and identify strategies for its effective implementation. Join us in exploring how BIM can empower us to preserve and celebrate our rich architectural legacy for future generations.

Keywords:

Heritage Building Information Modeling (HBIM), Standardization, Interoperability, Documentation, Preservation