Record Nr. UNISA996465296503316 3D Research Challenges in Cultural Heritage II [[electronic resource]]: **Titolo** How to Manage Data and Knowledge Related to Interpretative Digital 3D Reconstructions of Cultural Heritage / / edited by Sander Münster, Mieke Pfarr-Harfst, Piotr Kuroczyski, Marinos Ioannides Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 **ISBN** 3-319-47647-5 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (X, 289 p. 132 illus.) Information Systems and Applications, incl. Internet/Web, and HCI;; Collana 10025 930.10113 Disciplina Soggetti Multimedia information systems Application software Optical data processing Computer graphics Database management Information storage and retrieval Multimedia Information Systems Information Systems Applications (incl. Internet) Image Processing and Computer Vision Computer Graphics Database Management Information Storage and Retrieval Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto A Model Classification for Digital 3D Reconstruction in the Context of Humanities -- Typical Workflows, Documentation Approaches and Principles of 3D Digital Reconstruction of Cultural Heritage -- Digital Reconstruction in Historical Research and its Implications for Virtual Research Environments -- Digital Research Infrastructures: DARIAH --Heritage and Museum Displays. Buildings, Cities, Landscapes,

Illuminated Models -- Interpretation of Sensor-based 3D

Documentation -- 3D Model, Linked Database, and Born-Digital E-

Book: An Ideal Approach to Archaeological Research and Publication -- 3D Models on Triple Paths -- New Pathways for Documenting and Visualizing Virtual Reconstructions -- Classification schemes for visualization of uncertainty in digital hypothetical reconstruction -- Show me the Data!: Structuring Archaeological Data to Deliver Interactive, Transparent 3D Reconstructions in a 3D WebGIS -- Enrichment and Preservation of Architectural Knowledge -- Simplifying Documentation of Digital Reconstruction Processes. Introducing an interactive documentation system -- Cultural Heritage in a Spatial Context. Towards an Integrative, Interoperable, and Participatory Data and Information Management.

## Sommario/riassunto

This book reflects a current state of the art and future perspectives of Digital Heritage focusing on not interpretative reconstruction and including as well as bridging practical and theoretical perspectives. strategies and approaches. Comprehensive key challenges are related to knowledge transfer and management as well as data handling within a interpretative digital reconstruction of Cultural Heritage including aspects of digital object creation, sustainability, accessibility, documentation, presentation, preservation and more general scientific compatibility. The three parts of the book provide an overview of a scope of usage scenarios, a current state of infrastructures as digital libraries, information repositories for an interpretative reconstruction of Cultural Heritage; highlight strategies, practices and principles currently used to ensure compatibility, reusability and sustainability of data objects and related knowledge within a 3D reconstruction work process on a day to day work basis; and show innovative concepts for the exchange, publishing and management of 3D objects and for inherit knowledge about data, workflows and semantic structures.