

Science and Technology for Archaeological Research Center

WP 6 – Coordination of Content

SORIN HERMON
research coordinator



THE CYPRUS
INSTITUTE

Science and Technology for
Archaeological Research Center
STARC



Franco Niccolucci



WHO WE ARE



Sorin Hermon



Denis Pitzalis



Valentina Vassallo



Other colleagues

- Regine Stein
- Phillips, Universitaet Marburg (PUM)
 - provide support to the mapping activities in the frame of the ingestion process.

Marzia Piccininno

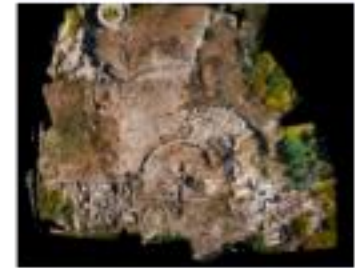
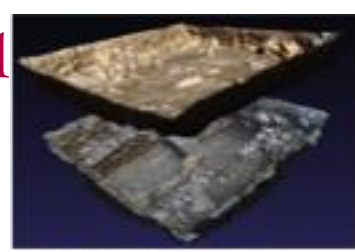
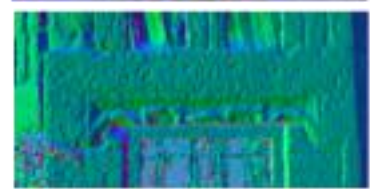
Ministero per i Beni e le Attività Culturali –
ICCU – coordinate activities in WP6 from ICCU



Towards innovative research paradigms in Cultural Heritage – arts and sciences in the 21st century

2D and 3D Scientific Visualization

- *2D image analysis*
 - Features extraction and Pattern recognition
 - Clustering and Classification
- *3D documentation*
 - Archaeological Excavations
 - Historic Buildings
 - Survey and Landscape
- *3-4D analysis and interpretation*
 - Integrated research platforms
 - Integration of “time” constraint
 - Monitoring degrade of archaeological landscape and monuments
- *Perception and tele-presence*
 - 3D stereoscopy
 - Museum communication
 - Scientific research
 - Social inclusion

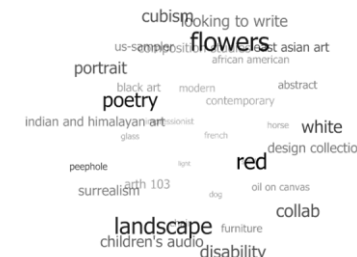


New approaches to knowledge management DATA - INFORMATION - KNOWLEDGE

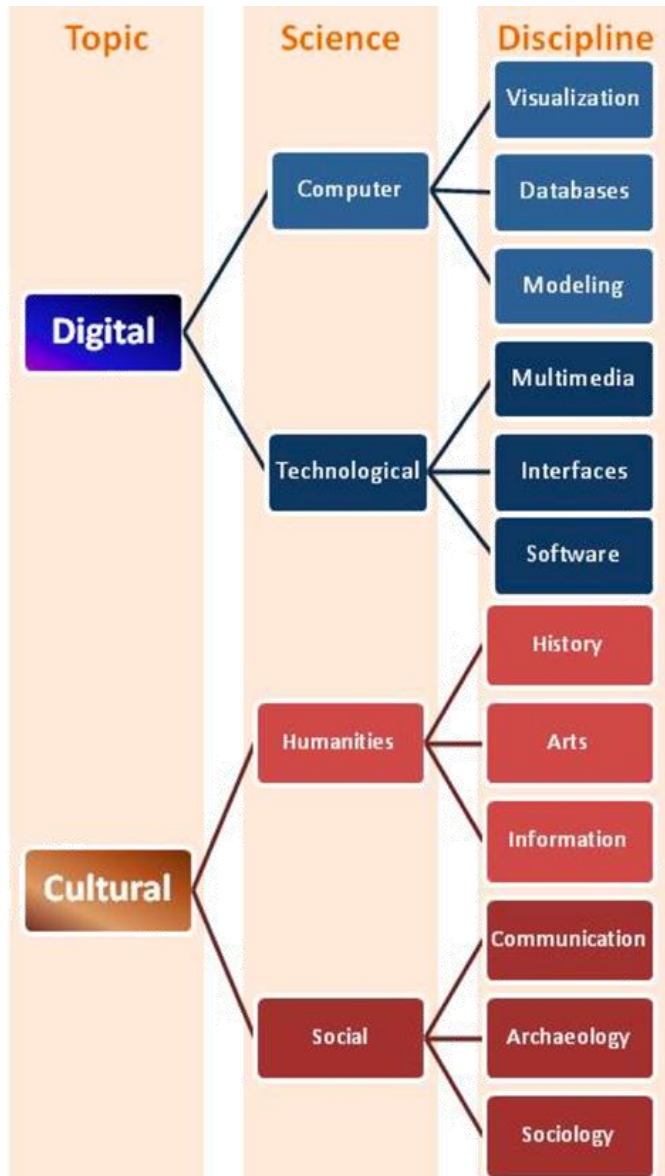


■ Digital Libraries

- *Semantic data-bases in hybrid environments*
 - Data harmonization
 - Data harvesting
- *National and International integration*
- *Knowledge extraction – digital tools of interaction*
 - Digital annotations
 - Semantic clustering
- *Reference collections*
 - Mapping
 - Visual analysis
- *Personalized Knowledge Representation*
 - 3D Semantic repositories
 - User-based content publication



Doctoral Programme in Digital Cultural Heritage (DCH)



DCH01 – New technologies for documenting CH
DCH02 – CH knowledge representation and transfer in the Digital Era.

DCH03 – Advanced theory and methods in DCH

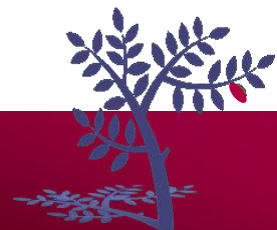
HERITAGE

conservation knowledge
transfer

DCH04 – Adding the n^{th} dimension in CH research.

DCH05 – Developing and designing digital tools of tomorrow.

DCH06 – Research management: funds raising, team working and scientific writing



National

Department of Antiquities (field-work, conservation, curatorship)

Cyprus University (archaeology research)

Byzantine Museum (virtual reconstructions, digital libraries)

Leventis Foundation (digital libraries)

Rita and Costas Severis Foundation (Musealization)

EU and Affiliates

CNRS-C2RMF / Louvre Museum (Material Sciences, Digitization)

Free University Brussels (Archaeological Documentation)

Italian National Council of Research (Digital Libraries)

Lund University (Digital Cognitive Technologies and tele-presence)

Israel Museum (Digital approaches to museum communication)

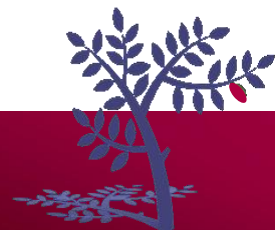
Tel Aviv University (Hyperspectral imaging)

US

Penn State University – image processing and search engines

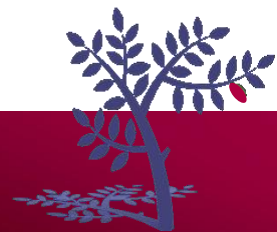


- RPF (national)
 - POLICHROMY - analysis of color structures on ancient icons
 - STARLAB - physical infrastructure for a mobile lab on digital archaeology and archaeometry
- EU – (IST, eCulture, Infrastructure, etc.)
 - 3DCOFORM – 3D for Cultural Heritage
 - ATHENA – Digital Libraries of museum collections for Europeana
 - Europeana Local – Digital Libraries of CH institutions for Europeana
 - STACHEM – Support Action for building infrastructures
 - CARARE – Digital Libraries of 3D models of CH architecture
 - V-MUST – Virtual Cultural Heritage Museums Network
 - **Linked Heritage - Digital Libraries of museum collections for Europeana**
- US – National Science Foundation EAGER program
 - CYDAR - digital library of ancient texts and classification of ancient icons based on image processing in collaboration with Penn State University
- Leventis Foundation
 - AC DC – Ancient Cypriot Digital Corpus
- Dorot Foundation
 - Shrine of the Book – the Dead Sea Scrolls digital library



Role in Linked Heritage

- WP6 “Coordination of Content” (Co) Leader (with ICCU) – 12 p/m
- WP1 “Management” – 2 p/m
- WP7 “Dissemination and training” – 1 p/m
- Activity period: months 1-30
- Content Provider:
 - Digital photos x1000+ Private collection of historic photos from Cyprus english jpeg CIDOC- CRM creative commons



Thank you



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<http://starc.cyi.ac.cy/>



sorinhermon



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