Patrimalp, Science of Heritage: perspectives on cultural artworks


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**Development of an integrated and interdisciplinary heritage science**

**CHALLENGES**

Patrimalp aims to:
- Develop an interdisciplinary scientific community at the heart of Univ. Grenoble Alpes
- Create innovative heritage research methods
- Initiate an interdisciplinary academic course on heritage
- Support heritage and culture policies

Carrying out these goals will strongly contribute to the attractiveness and international outreach of Univ. Grenoble Alpes.

**A cross-disciplinary project**

- History of art
- Archaeology
- Material sciences
- Geosciences
- Restoration and conservation
- Computing sciences
- Geography

**Case studies**

- Antic Theater of Lyon
- Epigraphical stone of Vaison-la-Romaine
- Saint-Michel de Connexe Priory
- Costumes and Jewelleries in the Alps
- Brocades transposed
- Neolithic rock art sites (Rocher du Château, Trou de la Féclaz)

**Purpose**

Aims to:
- Support heritage and culture policies
- Initiate an interdisciplinary academic course on heritage
- Create innovative heritage research methods
- Develop an interdisciplinary scientific approach

**Research**

Integrated study of Neolithic rock art

- Geographical and geological context
- Archaeological context

**Spatio-temporal visualisation**

Trajectories of supplying strategies

**WP1 - Raw matter resources and contextualisation**

**PURPOSES:**
- Identification of raw materials used in the processing of artefacts
- Socio-ecosystemic contextualization of raw material strategies and rock art production

**Scientific and technological challenges**

- Reconstitute the different “states” of the artefact
- Develop an ultimate integrated physico-chemical analysis of artefacts
- Understanding artefact materials through a selective analysis method
- Dealing with, organising and sustaining heterogeneous multidisciplinary data
- Write the history of artefacts

**Production of a common story of the artefact across the time in its environmental and cultural context**

**WP2 - Materials, manufacturing process and alteration**

**PURPOSES: INTRINSIC ANALYSIS**
- Identification and characterization of constituting matters of artefacts
- Understanding their manufacturing and alteration

**Cultural heritage matter as a « recorder » of artistic human past activities**
- Identification of « clues » inside the matter

**WP3: History, life and trajectories of artefacts**

**PURPOSES: EXTRINSIC ANALYSIS**
- Artefact story in native cultural context
- Understanding the artefact as artistic and cultural technical clue
- Spatial and temporal following tracks

**Scientific approach**

- Historiography of artefact
- History of artefact (primary and secondary sources, workshops, treatises, literature)
- Form and creation life
- Artistic cartography

**WP4 - Modelling and interconnected visualisation of cultural heritage**

**PURPOSES:**
- Modelling knowledge and reasoning about heritage artefacts, their components and context
- Geovisualisation
- Restitution and Rendering

**VISUALISATIONS**

- Textures, spatial, chronological, upgradable, interactive, 2D, 3D, augmented reality...


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