

Classe oberta (assignatura Patrimoni i Noves Tecnologies)

## **Towards the massive reality-based 3D semantic annotation of heritage artefacts**

Livio de Luca (Directeur de Recherche CNRS)

Sala de Graus de la Facultat de Lletres. Universitat de Girona  
Dijous 1 de març de 2018, a les 15.00 h

Entrada Lliure

The introduction of digital technologies into the practices of documentation, analysis and dissemination of cultural heritage is today an issue not only in the sphere of computer science, but also in the humanities and social sciences as well as in conservation sciences. The approaches developed by the CNRS-MAP laboratory focus on the construction of knowledge hybridisation paths to address the design of innovative systems for analysing the state of conservation of heritage artefacts, studying their temporal transformations, discovering their morphological similarity with other artefacts far in space and in time. At a time when significant technological and methodological advances are renewing the possibilities, how can we make concrete use of these advances to observe, analyse, preserve, disseminate and reinvest our heritage in a more rational, open, economical and sustainable way? In this talk, I'll try to put this challenge at the crossroads of a few trends that shape the contemporary landscape of digital humanities: the democratisation of digitisation means, the emergence of new approaches for the massive cross-analysis of digitised content, the on-going harmonisation of heritage information systems through the formalisation of multidisciplinary knowledge.

### **Livio de Luca**

Architect, PhD in engineering, HDR (habilitation) in Computer Science, Livio De Luca is research director at CNRS (french national centre for scientific research) and director of the MAP (Models and simulations for architecture and cultural heritage) lab. Scientific advisor and member of several national (Culture3DClouds, ANR Monumentum, Fiat Lux,..) and international (3D-ICONS, MC\_ITN-DCH,..) research projects, his research activity focuses on digital surveying, modelling and representation of architectural heritage as well as on the design and implementation of semantic-based information systems for describing, analyzing, documenting and sharing digital representations of heritage buildings. As member of international scientific committees and working groups for the digital documentation of cultural heritage, he served as general co-chair of the UNESCO/IEEE/EG DigitalHeritage international congress in 2013 (Marseille) and 2015 (Granada). He has been awarded the "Prix Pierre Bézier" of the "Fondation Arts et Métiers" in 2007 and the "Médaille de la Recherche et de la Technique" of the "Académie d'Architecture de France" in 2016.