

NEWSLETTER 80

Istituto Nazionale di Fisica Nucleare

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EUROPEAN PROJECTS

ITALY LEADS THE FIRST EUROPEAN COMPETENCE CENTER FOR CULTURAL HERITAGE

On 9 February, the 4CH - Competence Centre for the Conservation of Cultural Heritage - project, funded with nearly 3 million euros within the scope of Horizon 2020, was launched. 4CH will be a large

distributed virtual network, coordinated by Italy with INFN and managed together with a partnership of public and private entities, which includes 19 partners from 13 different countries. It will be the first European competence centre for cultural heritage, and will become operational in three years, at the end of the first phase that will be used to establish the logistical and managerial infrastructure. Its activity will be divided into three main areas: 3D digital modelling of monuments and sites, semantic tools to archive documentation, classifying it and making data available ex post, and scientific analysis as a support for conservation and restoration. 4CH's entire infrastructure will be based on the cultural heritage cloud, part of EOSC's federated European cloud model, it will employ high-performance computing (HPC) and artificial intelligence tools. 4CH will be at the service of the European cultural heritage, exploiting the most innovative digital technologies, and the data and information will be made available to experts in various disciplines, who will work in an integrated way in order to monitor the health of our cultural heritage, assess the risks to which it is subject, and define restoration or reconstruction works in case of damage owing to natural degradation or environmental disasters.