



Istituto Nazionale di Fisica Nucleare
SEZIONE DI PAVIA

Bando nr. 22414_2020 - Quarto verbale della Commissione esaminatrice allegato n. 1

CONCORSO NR. 22414/2020 PROVA ORALE – QUESITI

- Diritto amministrativo, diritto civile, diritto penale (per reati contro la pubblica amministrazione), contabilità di Stato e degli enti pubblici

- 1) Il Bilancio dello Stato si divide da un punto di vista strutturale in due grandi parti: una prima relativa alle entrate; una seconda concernente le spese. Si descriva brevemente la loro ripartizione.
- 2) In tutti gli atti amministrativi, eccetto quelli normativi e a contenuto generale, esiste un obbligo di motivazione. Cosa si intende?
- 3) Quali sono i requisiti essenziali di un contratto?
- 4) L'utilizzazione di invenzioni conosciute per ragioni di ufficio (art. 325 c.p.) è punita?

- Diritto dell'Unione Europea con particolare riferimento alle procedure concorsuali comunitarie e nazionali e/o regionali per la scelta del contraente nei contratti pubblici

- 5) La rendicontazione dei costi nei progetti H2020 (costi eleggibili e non eleggibili, overhead)
- 6) Il candidato descriva le modalità di partecipazione ad un bando del programma quadro H2020 (Participant Portal, Funding Opportunities)
- 7) Le rendicontazioni periodiche. Descrizione del processo per la sottomissione delle FormC
- 8) Cosa è l'OLAF?



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Bando nr. 22414_2020 – Quarto verbale della Commissione esaminatrice allegato n. 2

CONCORSO NR. 22414/2020
PROVA ORALE – LINGUA INGLESE

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.

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Bando nr. 22414_2020 – Quarto verbale della Commissione esaminatrice allegato n. 3

CONCORSO NR. 22414/2020
PROVA ORALE – LINGUA INGLESE

EUROPEAN PROJECTS

CHETEC-INFRA: A NEW NETWORK TO SUPPORT NUCLEAR ASTROPHYSICS

In Europe, researchers studying the mechanisms for the synthesis of chemical elements in stellar combustion or in extreme cosmic events will be able to make use of a new resource: the ChETEC-INFRA (Chemical Elements as Tracers of the Evolution of the Cosmos-Infrastructure) project, which seeks to facilitate the sharing of results obtained and methodologies used in this field of investigation. ChETEC-INFRA will constitute a network between the three different types of infrastructures on which research in this sector is based: astro-nuclear laboratories, which provide data on impact cross-sections of nuclear reactions; supercomputers, which perform calculations of stellar structure and nucleosynthesis; and telescopes and mass spectrometers, which collect data on the quantity of elements and isotopes. The data will be stored and catalogued for their long-term, open-access use within ChETEC-INFRA. Financed within the context of Horizon2020 with 5 million Euro for four years, the network unites 32 institutions in 18 European countries. The bodies involved include many Italian universities and INFN, which will contribute to the initiative with its own expertise in the creation of targets and detectors. In particular, it will be responsible for developing new materials to be used as targets for accelerated beams of particles for studying nuclear reactions at very low energy. In addition, it will be in charge of designing innovative neutron detectors, such as composite scintillators and new plastic materials, in collaboration with industrial partners, and will coordinate the activities for validating the impact cross-sections of the reactions studied, creating and maintaining an open-access database. Finally, it will support the dissemination of results and the training of future generations of researchers, through schools and masterclasses.

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