

## **NEWSLETTER 71**

Istituto Nazionale di Fisica Nucleare

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## **APPLICATIONS - COVID-19**

## ITALIAN PUBLIC SUPER-COMPUTING SUPPORTING THE FIGHT AGAINST THE PANDEMIC

Over 8 million hours of computing available to researchers for projects aimed at fighting the CoViD-19 epidemic. This is the commitment of the INFN CNAF National Data and Computing Centre together with CINECA, CMCC and ENEA, which represent the main public

supercomputing entities in Italy, in an initiative promoted by the Big Data Association, in close cooperation with the international foundation Big Data and Artificial Intelligence for Human Development. The goal is to support public and private research groups for a wide range of projects, without disciplinary limits: from biomolecular, biochemical and bioinformatics research to bio-simulations, from epidemiological analyses to mitigation of the pandemic's impact. The initiative responds to the growing demand for computing resources and is aimed at supporting research projects in which the use of supercomputers is necessary for simulations and the management of large amounts of data, as in the case with the identification of therapies, the study of viral antibodies, the knowledge of the molecular structure of the virus and its mutations, the preparation of vaccines, as well as the development of models of diffusion and containment of CoViD-19. The announcement takes into consideration the working groups' need to be able to get on with research quickly: the initiative hence provides for the possibility of presenting projects on an ongoing basis. Furthermore, proposals will be evaluated upon submission, in a couple of days, by a technical-scientific commission, and they will be able to start immediately. Researchers of all nationalities, as long as they are affiliated with public or private Italian institutions, can present their research projects.