



News - Announcement Topic: Computing



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# ExaHealth 2021

7 OCTOBER, 2021 | By Andrew Purcell ([/authors/andrew-purcell](https://authors/andrew-purcell)) & James Beacham ([/authors/james-beacham](https://authors/james-beacham))

The poster features the title 'ExaHealth 2021' in large yellow letters. To the left is a graphic of a neural network with five nodes on the left connected to one node on the right, which is part of a stethoscope graphic. To the right, a white box contains the text 'Exascale computing and machine learning for public health'. Below that, another white box contains the date '18 October 2021'. At the bottom right, the URL 'indico.cern.ch/e/ExaHealth\_2021' is displayed. The bottom of the poster includes a QR code, the CERN openlab logo, the Chelonia Applied Science logo, and the CERN logo.

[//cds.cern.ch/images/CERN-HOMEWEB-PHO-2021-173-2](https://cds.cern.ch/images/CERN-HOMEWEB-PHO-2021-173-2)

ExaHealth 2021 workshop (Image: CERN)

On Monday, 18 October, CERN openlab and Chelonia Applied Science will host a first-of-its-kind workshop called ExaHealth 2021. The half-day virtual event will begin at 1.00 p.m. CEST and will examine the potential for exascale computing and machine learning to support efforts to improve public health. The workshop is free and open to all.

With recent advancements in high-performance computing (HPC) towards exascale (the capability to perform a billion billion ( $10^{18}$ ), or a quintillion, computing operations per second) and the continued development and proliferation of both machine- and deep-learning techniques in all sectors, it is imperative that we ensure these resources are capitalised upon fully in a realm that affects us all: public health.

Projects supported by the European Union (such as Exscalate4COV and LIGATE, with the participation of dozens of institutions, including Chelonia Applied Science, hosted at the Innovation Office of the University of Basel) demonstrate the potential that exascale HPC and machine learning offer for the health sciences. This is also seen through initiatives pioneered by CERN openlab, such as the CERN Science 4 Open Data project. But what are we missing? How can we ensure that we will respond quickly and efficiently to future health situations, including (but not limited to) pandemics?

Join us at ExaHealth 2021 to explore how exascale computing and machine learning are used in the health and life sciences and to begin charting a course for the future.

Full information – including a list of speakers – is available on the event page: [https://indico.cern.ch/e/ExaHealth\\_2021](https://indico.cern.ch/e/ExaHealth_2021) ([https://indico.cern.ch/e/ExaHealth\\_2021](https://indico.cern.ch/e/ExaHealth_2021)). Register by Friday, 15 October.

[CERN openlab \(\[/tags/cern-openlab\]\(https://tags/cern-openlab\)\)](https://tags/cern-openlab) [workshop \(\[/tags/workshop\]\(https://tags/workshop\)\)](https://tags/workshop)

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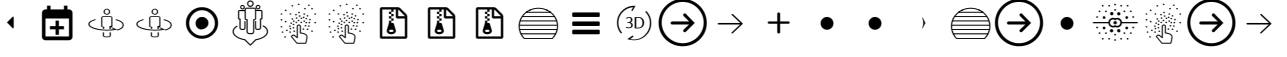
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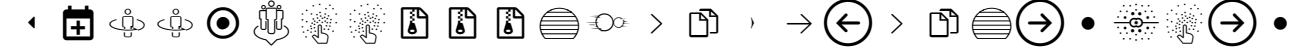
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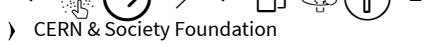


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