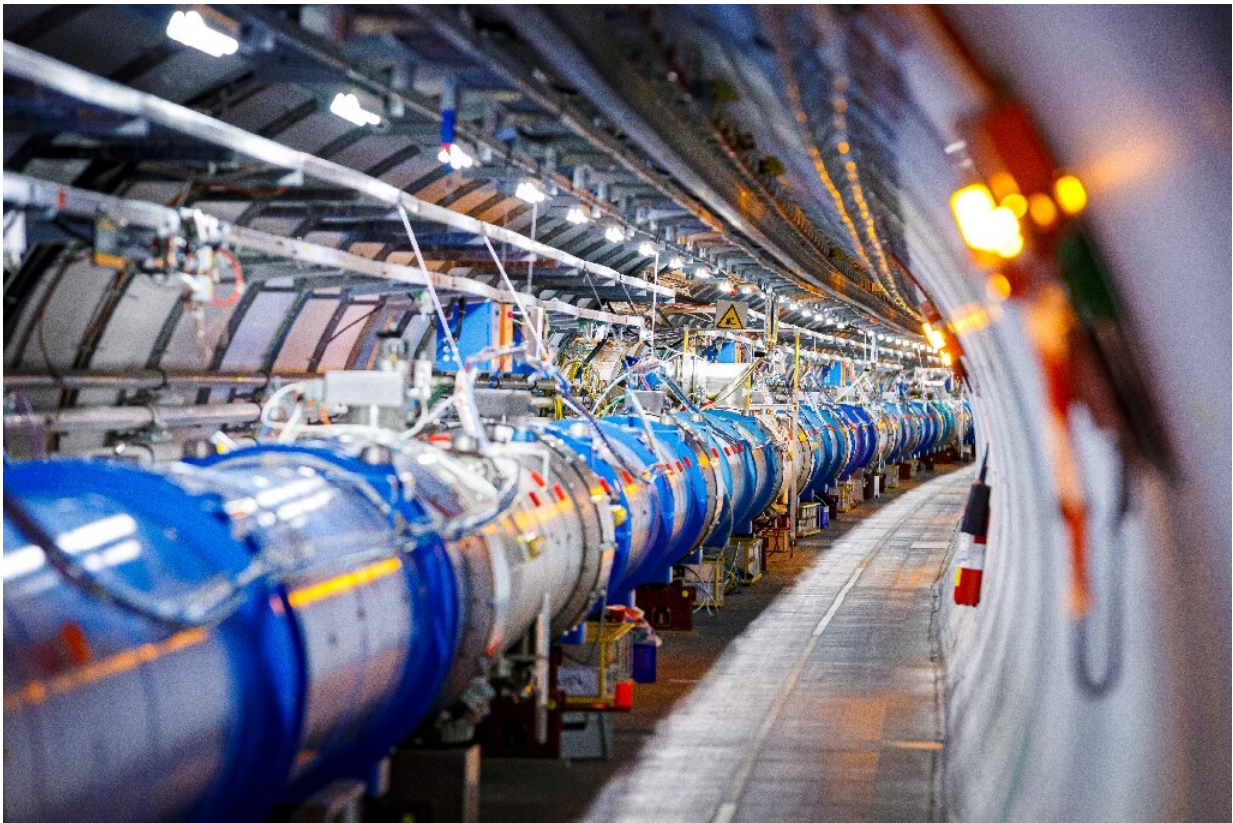


CERN physics lab developing basic COVID-19 ventilator

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CERN is home to the Large Hadron Collider (LHC)—a giant lab in a tunnel straddling the French-Swiss border that is the world's most powerful particle accelerator

Physics experts are working at Europe's CERN lab to create a basic

ventilator for mild coronavirus sufferers and recovering patients, the facility said on Wednesday.

The Swiss-based lab says a model that could run on batteries should be ready for testing in hospitals within weeks and could eventually free up heavy-duty machines for use on critical COVID-19 patients.

The facility in Geneva is developing ideas pitched by its 18,000-strong global network of experts.

"We want to deploy our resources and competences to contribute to the fight against the COVID-19 pandemic," said director-general Fabiola Gianotti.

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Physicists and engineers from the LHC team are working on the high-energy [physics](#) community ventilator, or HEV.

The pandemic has led to a global shortage of ventilators to help hospitalised patients to breathe.

"The team realised that the types of systems used to regulate gas flows for particle physics detectors could be used to design a novel ventilator," CERN said in a press release.

"The HEV design could be used for patients in mild or recovery phases, enabling the more high-end machines to be freed up for the most intensive cases."

Prototype produced

The [ventilator](#) is cheap and can run on batteries, solar panels or emergency generators.

The HEV could therefore be used in places with limited resources or unstable power supplies.

CERN is already producing sanitiser gel for local police forces and using its 3D printers to make masks and perspex barriers for local law enforcement agencies.

Studies are also going on to see how the particle physics community's vast computing capacity could be used to help efforts towards finding a vaccine.

Any innovations CERN comes up with to help fight COVID-19 will be released under an open licence so equipment can be produced "wherever there is a need", the lab said.

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