Tackling tomorrow's computing challenges today at 2021 CERN openlab technical workshop

CERN openlab held its annual technical workshop on 9-11 March. Due to the pandemic, the 200 participants joined the workshop this year via Zoom.

CERN openlab is a unique public-private partnership, through which CERN collaborates with leading technology companies to accelerate innovation in the computing technologies required by the LHC research community. Today, there are over 20



Today, 34 R&D projects involving computing technologies are being carried out through CERN openlab.

companies and research organisations working together in CERN openlab.

The 34 R&D projects carried out through CERN openlab today are all related to computing technologies, but are spread across departments at CERN, as well as across experiments. CERN openlab's annual technical workshop is an opportunity for those working on these projects to come together – along with representatives of the external members of the collaboration – to discuss the latest developments. "It was great to see the innovative ways in which the project teams are working to tackle the computing challenges we face – particularly those related

to the ambitious upgrade programme for the LHC," says Maria Girone, CERN openlab CTO.

The workshop was spread across three days: Tuesday was dedicated to exascale high-throughput and high-performance computing technologies, Wednesday to artificial intelligence (AI) and Thursday to

(Image: CERN)

quantum technologies. Another important aspect of CERN openlab's work is its support for communities beyond high-energy physics. The second half of Wednesday's session was dedicated to these activities.

At the end of the workshop, Alberto Di Meglio, the head of CERN openlab, presented a high-level roadmap for CERN openlab's new three-year phase, which is now getting under way. "Together, we are shaping an R&D programme for the coming years – focused on exascale, Al and quantum technologies – that will provide important support to the LHC research community, as well as to other scientific fields," says Di Meglio. He also highlighted CERN openlab's 20th anniversary, which will be celebrated later this year.