Knowledge Transfer
Accelerating Innovation

Frequently asked questions

What is the meaning of knowledge transfer at CERN?

CERN is home to some of the world's most complex scientific instruments, used by physicists to probe the fundamental structure of the universe. Reaching ambitious scientific objectives requires the development of advanced instruments and new technologies. These technologies, and the human expertise associated with them, often have potential applications in areas beyond high-energy physics. As an integral part of its mission, CERN strives to ensure that its innovations bring practical benefits to society as a whole, through knowledge transfer.

What is CERN's Knowledge Transfer group?

The Knowledge Transfer (KT) group at CERN aims to engage with experts in science, technology and industry in order to create opportunities for the transfer of CERN's technology and know-how. The ultimate goal is to accelerate innovation and maximise the global positive impact of CERN on society. This is done by promoting and transferring the technological and human capital developed at CERN. The CERN KT group promotes CERN as a centre of technological excellence, and promotes the positive impact of fundamental research organisations on society.

What kind of technologies does CERN develop?

CERN's expertise builds broadly on three technical fields: accelerators, detectors and computing. Behind these three pillars of technology, lie a great number of areas of expertise: from cryogenics to ultra-high vacuums, from particle tracking and radiation monitoring to superconductivity and many more.

You can browse our technology portfolio to explore more.

Which areas of society can CERN technologies impact?

CERN technologies, and the human expertise associated with them, translate into positive impact on society in many different fields: ranging from areas such as aerospace, medical and biomedical, industry 4.0, cultural heritage, safety, emerging technologies and innovations towards a better planet. In addition, we are continuously exploring additional fields for future societal applications for CERN technologies.

Read more about societal applications of our technologies in our 'From CERN technologies to society' page.