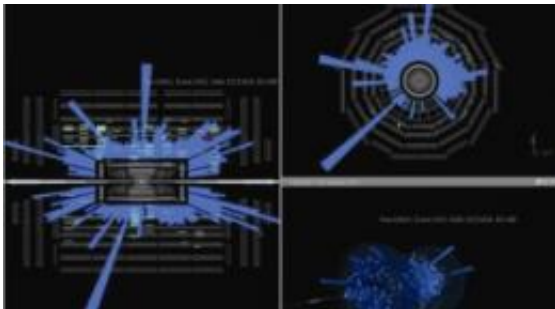


# Particle physics is not just black holes and antimatter

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Particle physics saves lives, connects continents through new channels of communication, helps us understand the world around us and inspires tomorrow's leaders.

While the perils associated with particle physics, from Earth-gobbling [black holes](#) to Vatican-destroying amounts of antimatter, gain news headlines, it's easy to overlook the large economic and societal benefits of particle physics research.

The technology designed and engineered for paradigm-shifting experiments, such as the [Large Hadron Collider](#) at [CERN](#), is some of the most advanced in the world and as particle physics technology moves forward so technology for industries as varied as biotechnology, energy and communications also rapidly progresses.

The Institute of Physics (IOP) and the Science and Technology Facilities Council (STFC) are today, Thursday, 28 May, launching a new report, 'Particle physics - it matters' to introduce a wider audience to the economic and societal benefits of particle physics research.

Tajinder Panesor, manager, [science policy](#) at the Institute of Physics, said, "Many more people are now familiar with the 'Big Bang' machine and the hunt for the 'God' particle but we feel that there are still some questions around why so much effort is expended on this type of activity.

"We want everyone logging onto the Web or going to the hospital for a scan to know that what they're experiencing has only been made possible through particle physics research."

The new report lays out how particle physics benefits the UK's economy and its society through healthcare and communication spin-offs and how it provides British industry with world-leading technology, while also helping us address global challenges.

The report includes results from an exclusive survey which asked more than 800 physics undergraduates from eight of the UK's leading university physics departments what it was that inspired them to study physics.

An independent report compiled for the Department for Innovation, Universities and Skills, *The Demand for STEM Graduates*, states that the UK will need almost one million more STEM graduates by 2017, doubling the number of STEM graduates produced each year, if we are to face off the economic, energy and environment-related challenges that we currently face. It is therefore significant that the three subjects that most attracted first year undergraduates to study physics, with nine of every 10 first year undergraduates responding so, are quantum

phenomena, nuclear physics and astrophysics, all of which fall under the umbrella of or are closely associated with [particle physics](#).

The report summarises research being undertaken by particle physicists at the furthest frontiers of basic science: understanding mass; looking for antimatter; detecting dark matter; and grasping further spatial dimensions, but for every explicit moment of success in these bold adventures, hundreds of other advances are made that touch our lives in ways most don't consider.

More information: [Particle physics - it matters](#)

Source: Institute of Physics ([news](#) : [web](#))

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