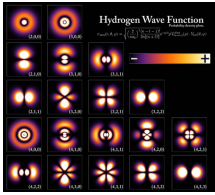


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By: Tudor Vieru, Science Editor



Particle physics constantly makes a difference in our daily lives, and is not entirely focused on producing artificial stars, black holes, or micro-Universes in a box

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## The Real Benefits of Particle Physics

*It's not all black holes and antimatter*

Hollywood movies have always had the talent of inspiring panic where there was usually nothing to fear, and the latest productions are no different, what with the threat of the Vatican being destroyed by antimatter generated at the Large Hadron Collider and all that. Needless to say, the script is pure fantasy, but people have begun to be very worried about such things as black holes and antimatter over the past couple of years, and they have almost always found their scape goat in particle physics.

The LHC is usually at the center of criticisms, although other large particle accelerators have also been coming under increased attack lately. But scientists say that the fears are unfounded, and ask people to consider the benefits that particle physics has brought into their daily lives.

"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," Tajinder Panesor, the Science Policy manager at the London-based international organization Institute of Physics (IOP), said.

Concerns over a potential Big Bang happening on Earth appeared when some said that the high-energy particles that would be smashed head-on in CERN's LHC had the potential to recreate the moments right after the Universe was exploded into existence. Also, fears that black holes might emerge have also prompted a number of lawsuits against the European initiative, which were, of course, rejected as baseless. But the idea that the machine is dangerous has remained stuck in some people's heads, and they are now going out of their way to stop it, even though they don't know exactly why.

Despite the fact that the main objectives of most particle physics studies are related to understanding mass and gravity, looking for antimatter, detecting dark matter, or discovering other spatial dimensions, in the course of these researches, tens and hundreds of small inventions emerge as byproducts. And it's these inventions that make our daily lives easier, even if we like to admit it or not. Groups seeking to stop the LHC from operating should understand that they cannot stop the progress, and that there is a large portion of this planet's population that would accept potential death over certain stagnation.