

'God particle' nets Nobel for physicists

Briton, Belgian share prize for Higgs boson

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STOCKHOLM — Nearly 50 years after they came up with the theory, but little more than a year since the world's biggest atom smasher delivered the proof, Britain's Peter Higgs and Belgian colleague Francois Englert won the Nobel Prize in physics Tuesday for helping to explain how matter formed after the Big Bang.

Working independently in the 1960s, they came up with a theory for how the fundamental building blocks of the universe clumped together, gained mass and formed everything we see around us today. The theory hinged on the existence of a subatomic particle that came to be called the Higgs boson — or the "God particle."

In one of the biggest breakthroughs in physics in decades, scientists at CERN, the European Organization for Nuclear Research, announced last year that they had finally found a Higgs boson using the \$10 billion particle collider built in a 17-mile tunnel under the Swiss-French border.

In a statement issued by the University of Edinburgh, where he retired as a professor, the famously shy, 84-year-old Higgs said he hoped the prize would help people recognize "the value of blue-sky research."

Englert, 80, said the award pointed to the importance of scientific freedom and the need for scientists to be allowed to do fundamental research that doesn't have immediate



Englert

Higgs

practical applications.

"You don't work thinking to get the Nobel Prize," said Englert, a retired professor at the Free University of Brussels. Still, "we had the impression that we were doing something that was important, that would later on be used by other researchers."

The Nobel selection committees are notoriously cautious, often allowing decades to elapse before honoring a scientific breakthrough, and their choices are hard to predict. But this time, the prize went to people who were widely expected to get it.

"In CERN here, most all of the physicists I know, about 95 percent, expected those two would win it. The question was if there would be a third and who it would be," said Joe Incandela, a professor of physics at the UC Santa Barbara and leader of the CMS experiment, one of the two groups that discovered the Higgs particle.

Before the announcement, there had been questions over whether a group of American scientists who published a paper shortly after Higgs would also be honored, or whether any of the thousands of scientists at CERN would share in the prize, too.

The two winners will share a prize worth \$1.2 million. The Nobel Prizes, established by Swedish industrialist Alfred Nobel, have been given out since 1901.