

## Scientists Raise Doubts About Higgs Boson Discovery, Say It Could Be Another Particle

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### Notes

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In a new paper that has raised eyebrows around the world, an international team of scientists says there is no proof that the particle whose discovery was confirmed last year by physicists at CERN is the long-sought Higgs boson.

"It is true that the Higgs particle can explain the data but there can be other explanations." Says Dr. Mads Toldal Frandsen, an associate professor in the University of Southern Denmark's Center for Cosmology and Particle Physics Phenomenology and a member of the team.

The new research seems to piggyback on previous research suggesting that the Higgs boson is actually made up of smaller particles, UPI reported.

CERN's data simply isn't precise enough to prove the particle discovered was the Higgs boson, Frandsen said. And he's not the only physicist to acknowledge the ambiguity in the data.

"The data from the LHC experiments are certainly consistent with the Higgs expectations of how it is produced and how it decays, as well as the spin of this particle," Dr. Michael Tuts, a particle physicist at Columbia University in New York City and a leading researcher at CERN, told The Huffington Post in an email.

If it wasn't the Higgs boson CERN scientists found, what was it?

"We believe that it may be a so-called techni-higgs particle," Frandsen said in the statement.

The Higgs and techni-higgs have similar properties but belong to different theories of the universe, according to the statement. And while the Higgs is believed to be an elementary particle, the techni-higgs isn't. It's composed of two so-called techni-quarks, which are believed to be elementary particles.

Note: Some physicists believe quark “particles” do not exist