

Italian physicist behind 'faster-than-light' test resigns

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An Italian physicist at the head of a team that made a cautious but hugely controversial claim that neutrinos may travel faster than the speed of light resigned on Friday following calls for his dismissal.

Antonio Ereditato submitted his resignation before a vote on a motion by some members of his OPERA team that he be removed after tests this month contradicted the claim that the universe's speed limit had been broken.

"I hope OPERA will find new unity and a new leadership to pursue its main <u>target</u> of observing the appearance of a new type of neutrinos," said Antonio Masiero, the deputy head of the Italian Institute for <u>Nuclear Physics</u>.

Masiero said another test on the speed of neutrinos, a type of sub-atomic particle, would still be carried out later this year to check OPERA's findings.

OPERA is part of the European Centre for Nuclear Research (<u>CERN</u>) and carried out its experiment at the Gran Sasso Laboratory in central Italy.

A headline in Corriere della Sera called Ereditato "the physicist of flop."

Ereditato's team last September announced that neutrinos appeared to have travelled faster than the speed of light, a claim that would have



upended Albert Einstein's <u>theory of relativity</u> -- a cornerstone of <u>modern physics</u>.

The neutrinos were timed at their departure from CERN's giant underground lab near Geneva and again, after travelling 732 km (454 miles) through the Earth's crust, at their arrival at Gran Sasso in the Apennine Mountains.

To do the trip, the neutrinos should have taken 0.0024 seconds.

Instead, the particles were recorded as hitting the detectors in Italy 0.0000006 seconds sooner than expected.

Knowing their findings would stir a storm, the OPERA team urged physicists to carry out their own checks to corroborate or refute what had been seen.

CERN said technical hitches may have skewed the initial measurements, something that critics of the findings said they had always suspected.

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