

Follow-up on CERN's OPERA Neutrino Results



Submitted by Huping Hu on Wed, 09/28/2011 - 18:07, <http://2012daily.com/?q=node/15>

As a follow-up to [CERN's New "Information for World Transformation" ?](#) appeared in 2012 Daily, we report here that there are scientists who have provided alternative explanations to the apparent faster-than-light neutrino speed reported by CERN and there are also scientists who are claiming victories over OPERA results supporting their theories.

In a paper entitled "Neutrino, flying from CERN to LNGS, and Brachistochrone" to appear in [viXra](#) preprint archive and be published in [Prepsapcetime Journal](#) shortly (links shall be provided here once available), Gunn Quznetsov provides an alternative explanation based on brachistochrone effect. His Abstract states that "*[t]he result of the OPERA neutrino experiment at the underground Gran Sasso Laboratory (LNGS) is explained by the brachistochrone effect.*" So please check out his paper to hit the press.

In another paper entitled "[On the Neutrino Opera in the CNGS Beam](#)" which has just appeared in [viXra](#), Armando V.D.B. Assis states that "*[here], we solve the relativistic kinematics related to the intersection between a relativistic beam of particles (neutrinos, e.g.) and consecutive detectors. The gravitational effects are neglected, but the effect of the Earth rotation is taken into consideration under a simple approach in which we consider two instantaneous inertial reference frames in relation to the fixed stars: an instantaneous inertial frame of reference having got the instantaneous velocity of rotation (about the Earth axis of rotation) of the Cern at one side, the lab system of reference in which the beam propagates, and another instantaneous inertial system of reference having got the instantaneous velocity of rotation of the detectors at Gran Sasso at the other side, this latter being the system of reference of the detectors. Einstein's relativity theory provides a velocity of intersection between the beam and the detectors greater than the velocity of light in the empty space as derived in this paper, in virtue of the Earth rotation.* Please read his paper for further information.

Among scientists who claim that the OPERA supports their theories are Matti Pitkanen and supporter(s) of Florentin Smarandache.

Matti Pitkanen in a blog piece entitled "[More about nasty superluminal neutrinos](#)" states that "if the finding turns out to be true it will mean for TGD what Mickelson-Morley meant for special relativity." Pitkanen remarked that "[t]he reactions to the potential discovery depend on whether the person can imagine some explanation for the finding or not. In the latter case the reaction is denial: most physics bloggers have chosen this option for understandable reasons. What else could they do? The six sigma statistics does not leave much room for objections but there could of course be some very delicate systematical error involved." In his TGD theory, the OPERA results can be explained as follows: *For many-sheeted space-time light velocity is assigned to light-like geodesic of space-time sheet rather than light-like geodesics of imbedding space $M4 \times CP2$. The effective velocity determined from time to travel from point A to B along different space time sheets is different and therefore also the signal velocity determined in this manner. The light-like geodesics of space-time*

sheet corresponds in the generic case time-like curves of the imbedding space so that the light-velocity is reduced from the maximal signal velocity. . Please his blog piece for details.

Finally, 2012 Daily also received a press-release-like piece written by Ion Patrascu. It is entitled "[Scientist deduced the existence of particles with faster-than-light speeds recently discovered by CERN](#)" and states in part: "In the breaking News on September 22, 2011, in the LiveScience.com, it is said that proven true, the laws of physics have to be re-written: [http://news.yahoo.com/strange-particles-may-travel-faster-light-breaking....](http://news.yahoo.com/strange-particles-may-travel-faster-light-breaking...) Professor Florentin Smarandache from the University of New Mexico, United States, has deduced the existence of particles moving faster-than-light in a published paper called "There Is No Speed Barrier in the Universe" in 1998, as an extension of a 1972 manuscript that he presented at the Universidad de Blumenau, Brazil, in a Tour Conference on "Paradoxism in Literature and Science" in 1993. His paper is based on the Einstein-Podolsky-Rosen Paradox (1935), a Bohm's paper (1951) and Bell's Inequalities (1964). For his prediction of particles of speeds greater than the speed of light (called "Smarandache hypothesis") and for his introduction of the Neutrosophic Logic, Set, and Probability (which are the most general and powerful logic and respectively set and probability theories today), Dr. Florentin Smarandache was awarded the Telesio-Galilei Academy Gold Medal in 2010 at the University of Pecs in Hungary." Interested readers are encouraged to read the whole piece and make judgments of their own.

Update (09-30-2011) on Quznetsov's paper:

viXra: <http://vixra.org/abs/1109.0062>

PSTJ: <http://prespacetime.com/index.php/pst/article/view/261>

Huping Hu & Maoxin Wu

September 28, 2011