

## Faster Than Light

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Einstein had suggested, following negative result of Michelson-Morley experiment that speed of light was a universal constant, independent of velocity of observer, and further, no material signal could travel faster than light. This postulate of constancy of velocity of light became foundation for special theory of relativity, and also lead to discovery of the famous formula  $E = mc^2$ , which became the basis for building of atom bomb. Theoretical physicists have been studying tachyons, hypothetical particles traveling faster than light. Tachyons have some very interesting properties, which are of interest not only to physicists, and philosophers of science, but also, spiritualists. In this paper, I narrate these properties of tachyons, and their relevance to spirituality.

Among the most interesting properties of tachyons, is that they travel, backwards in time. This special property comes, from the equations of special theory of relativity, in which time and space get mixed up, via observers' velocity and its ratio with speed of light. Among the other interesting effects of special relativity are, that as the velocity increases, the clocks slow down, lengths contract, the object becomes more massive. All these predictions have been verified experimentally.

The special relevance of tachyons to spirituality, is via, their super-luminous (faster than light) property, specifically in the realm of thought propagation. It is felt that thought communication is not within the restriction imposed by the light speed limit, and must be superluminal. Thoughts therefore must be propagated on some sort of tachyonic waves, originating from the metaphysical soul. Baba says that thoughts of children reach him, even before they occur to the children. This statement is in complete accordance with thoughts being propagated on a tachyonic wave. Because as mentioned earlier, a particle traveling faster than light, propagates backwards in time, and therefore reaches its destination at a moment earlier than that at which it originated!

Another interesting property of tachyons is in connection with what are called as black-holes. Reader may be aware, that black-holes are supposed to be holes in the fabric of space-time. In traditional physics a black-hole is created when a massive star starts contracting un-stoppably under its own weight, and finally it literally disappears from the physical universe, leaving behind a gaping hole in space, having a mass equal to that of the original star. For this to happen, the star must be more massive than what's the so called Chandrasekhar limit, discovered by Indian Nobel laureate Subramaniam Chandrasekhar. This limit is 1.3 times the mass of our sun (calculated in the usual Newtonian Copernicus model). Indian physicist Negi and his co-workers at Kumaun University, Nainital India, discovered that when a Tachyon falls through a black hole, it leaves this physical universe of three space-like and one time dimension, and enters a universe in which there are three time-like and one space-like dimension. This happens because of so called "topological change" in technical language. This idea was used in the book "Super-luminous Man" by a French physicist (now late). This new meta-universe of three time-like and one space-like dimension may be identified with Paramdham or soul world. This black-hole connecting physical universe with the meta-physical universe has been christened as "black-hole of Bangalore", by an unknown editor of Mensa Newsletter, published from UK by International Mensa, while publishing one of my articles containing this idea. The route to soul world is thus through this black-hole. It appears that the sort of tunnel vision reported in certain near-death experiences, and the being of light encountered, may be experience of traveling through this black-hole. To actually emerge from the other end of this black-hole, one would have to travel faster than light, which meshes in with the experiences of high speed reported during near-death.