

Light is said to simultaneously travel each and every possible path at once in order to find out which will be the fastest. We observe only the single path it actually travels. [HR: do we indeed *observe* its *path*?].

How does the light manage to do that?

First of all, Albert Einstein got his Nobel Prize mainly for his 1905 paper in which he explained light is emitted and absorbed as indivisible energy quanta (a.f.a.i.k. he never used the word *photon*).

In the same year, he published his ~~theory~~ conclusion of Special Relativity, which derives *relativistic length contraction* (Fitzgerald–Lorentz) from a few premises:

- 0: He concluded from experience [Michelson & Morley] that the *speed of light* be a universal constant;
- 1: the **Principle of Relativity**: from each observer's own perspective, the entire collection of laws of nature is identically the same, independent of how fast something else is passing by;
- 2: the **Principle of the Constancy of the Speed of Light**: to each and every observer the very same *speed of light* applies [HR: from his own perspective], independent of any motion of the light source. [HR: *not any* wave velocity depends on the velocity of the original oscillator].

Relativistic length contraction at the *speed of light* contracts the entire travelled distance to Sweet Fanny Adams.

From its own perspective, light perceives ZERO travel distance, for which it then obviously requires ZERO time.

From our perspective, light is an electromagnetic wave, which is sort of a moving oscillation (but the oscillating entity itself does not move in the direction of the wave velocity).

An oscillation requires more than zero time.

- ∴ Light cannot experience itself as an electromagnetic oscillation, let alone as a wave.
- ∴ It perceives no Poynting vector pointing in any direction; it merely is an energy quantum, a scalar.
- ∴? This bare energy quantum experiences length contraction to zero in each and every direction, hence the entire cosmos is 4π contracted to nought point nought.
- ∴? It can perform an instantaneous 4π inspection of the entire cosmos and choose in zero time which path is the best.