

## The World is not so weird if...

The World is not so weird if... as I refer in the articles viXra : 1211.0149 ; 1301.0157 ; 1307.0018, if we made the hypothesis of the subject's own time  $\tau_s$  (or TpS : Temps propre du Sujet) which is on the order of  $10^{-23}$  to  $10^{-25}$ s. As I formulated  $\tau_s$  is an irremediable duration that human intelligence (perception) is blind to.

Three recent experiments could confirm the validity of this hypothesis. First of all the most recent published in [phys.org/news/2015-10](http://phys.org/news/2015-10) : *'The universe really is weird, and a landmark quantum experiment proves it'*. Second one's in [phys.org/2015-10](http://phys.org/2015-10) : *'Zeno effect' verified-atoms won't move while you watch'*. Third one's in arXiv, in May 2015, concerning the *'Tunnel effect'*. Anatoli Kheifets of the Australian National University is the main contributor.

As I formulated  $\tau_s$  could explain the so-called entangled state. In fact the duration of the physical fulfilment of the entanglement ( $\Delta t_i$ ) is very short, almost instantaneous and so  $\Delta t_i < \tau_s$ . Formally quantum mechanics tell us that the wave function of the entangled objects remains one and indivisible after the entanglement operation. We can consider that the observer, being incapable to distinguish each one of the objects which entangle at the beginning, cannot any more recover any ability for distinguish and identify each one of the elements. It's what we named the non-localisation. We don't know which is which, although we know that their spatio-temporal histories are very different.

On the other hand, according my hypothesis, what is entangled in the referential where the entanglement is realized could appear to be not entangled for other observers in another referential. It's enough that the other one moves with a high velocity respectively to the first. Effectively, because the entanglement operation is a technical operation, this one obeys to the dilatation time's rule. Effectively, if  $\Delta t_i < \tau_s$ , it's possible that the  $\Delta t'_o$  became  $> \tau_s$  in the moving referential. If  $\gamma$  is large enough,  $\Delta t'_o = \gamma \Delta t_i$  and then the entanglement is not observe in this referential. In that way we can validate or invalidate the  $\tau_s$  hypothesis. I want to precise with insistence that work because entanglement operation is technical while  $\tau_s$  is an intrinsic value of the human being and then is the same in any referential where is located the human being.

$\tau_s$  is a **very** frustrating hypothesis for the human being, may be humiliating, but now it is confirm that the brain cannot perceive instantaneously the events of the external world. He needs at least 1/3 s before that one elementary sensory information reach at the consciousness. It is shown that how, with 'cerebral imagery' and notably with 'magneto-encephalography', we can follow the whole stages of the visual unaware and aware process in the human brain. (Conferences of the College de France professor:

Stanislas Dehaene). Then, it is difficult to postulate that the intermittently working process of the consciousness of the 'thinking subject' lead to an intellectual, an observational, working process, absolutely continuous of the subject.