Abstract

Instantaneous (Spooky) action was deemed necessary to explain observed spin measurement of entangled electrons. The reason sited is that hidden variables can not explain the experimentally observed behavior. Well, they can!

Noted calculations/observations

- 1. Entangled electrons always have opposite spin when measured in same direction.
- 2. When measured randomly but equal number of times, in three directions, 60 degrees apart, the spin should be different (>= 5/9) number of times. This is kind of Bells inequality assuming presence of hidden variables.
- 3. The actual experimental result in above case is that the different spin is measured in 50% of the times. (i.e. not $\ge 5/9$)

Problem description

1, 2, and 3 above, combined, are supposed to have eliminated the presence of hidden variables. And so, it necessitates instantaneous communication between the entangled particles. i.e. Spooky Action at a distance.

Current status

The issue is not resolved in either direction. i.e. we do not know whether the spooky action at a distance is real or not. Based upon available scientific literature, majority of scientists seem to incline towards "spooky action being real".

Time for Final Resolution

I have an exceedingly simple solution to this problem. It can be proved that the "spooky action at a distance" is not at all necessary to explain the experimental results in # 1, & 3. I am claiming that Einstein was right in this one too!

Although I have already explained 1 and 3, based upon my theory, I need to verify with it, the results of spin measuring experiments, conducted in more and more variations.

Therefore, I need someone to help me in compiling such results from published documents, or by actually performing the experiments.

I will appreciate if someone can point me to a set of such experimental results. Anyone in SFO bay area, with academic background in quantum physics, interested to support the validation is welcome. Please let me know in your comments.

Thanks & regards Krishan Vats