

**Classical and Quantum Entanglement**

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The classical and quantum entanglement behaves the same way.  
All the mysteries of quantum mechanics are errors.

We have a mass of 10 that receives a momentum of 100. It divides in two pieces with masses  $m_1$  and  $m_2$  and speeds  $v_1$  and  $v_2$ .



$$|m_1 v_1| + |m_2 v_2| = 100 ; \quad m_1 + m_2 = 10$$

The resulting momentums are entangled.  
Let's use the Bell's inequality:

$$\text{Property A} = p_1 > 50$$

$$\text{Property B} = m_1 > 5$$

$$\text{Property C} = p_2 > 50$$

$$(A, \bar{B}) + (B, \bar{C}) \geq (A, \bar{C}) \quad \Leftrightarrow$$

$$\Leftrightarrow (p_2 > 50, m_1 < 5) + (m_1 > 5, p_1 < 50) \geq (p_2 > 50, p_1 < 50)$$

$$\Leftrightarrow (50\% \times 50\%) + (50\% \times 50\%) \geq (100\%)$$

$$\Leftrightarrow \frac{1}{4} + \frac{1}{4} \geq 1$$

As the momentums are entangled the Bell's inequality is violated.

First, a quantum measurement of spin or polarization is not a measurement.

The entangled (or not) particles have a precise value of spin or polarization before the "measurement".

There is no expanding wave-function because  $x$  and  $t$  in the Schrödinger equation are not space and time but wavelength and period.