

QUANTUM ENTANGLEMENT

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ABSTRACT

The entanglement phenomenon is defined as a high level of correlation between quantum system states. There is no way to explain this correlation in terms of a shared cause. Quantum entanglement (QE) can happen when two or more quantum systems interact. Most interesting is the case when the correlations occur between systems that are spatially separated. This tells us that the changes in one system are instantaneously linked to changes in another system (even though there is no time for a signal to travel between them), here we are talking about non-local correlations. Since the concept of QE was proposed, it has received an increasing amount of attention. The basic concept, physical features, and entanglement measurement of QE have been completely and deeply explored in recent years, especially with the interdisciplinary development of quantum information's. QE has been widely exploited in quantum information, particularly quantum communication, due to its non-locality. My review chronicles the history of QE and offers several probable explanations for entangled particles¹.

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