Local Realism Versus Quantum Computers & Quantum Information Theory

Andrew P. Yake

Local realism reduces to the proposition that every physical effect arises exclusively at the spacetime locality where the determinate properties of physical reality determine that it be so. The causal model of quantum theory, however, and thus all prospects for quantum computers, require that local realism is false. The essential argument favoring quantum beliefs is that local realism cannot explain empirical Bell violations, whereas quantum theory can. By contrast, the article cited below offers compelling evidence to the contrary. Furthermore, such alleged refutations of local realism are predicated on an interpretation of the Bell inequality that many researchers reject (the cited article provides specific references). Meanwhile, the causal model of quantum theory reduces to the quantum formalism itself, which distributes outcomes across separate localities without providing enough information to determine what those outcomes are. More specifically, depending on subtleties of interpretation, the quantum formalism requires either: (A) There exists a bit of physical information such that this bit exists as mutually exclusive states, or (B) there exists a bit of physical information such that this bit is not physically informed. They are both contradictions. Pick your poison. Or reconsider local realism.

http://vixra.org/abs/1704.0078
Local Realism Explains Bell Violations (author Andrew P. Yake) - for a demonstration that all empirical evidence taken to support quantum theory over local realism plausibly does the reverse. The article comprises 8 pages, 4 figures, 6 equations, 32 references, 1 graph of testable predictions, and 2 paragraphs that purport to expose how the Bell inequality misrepresents the local realistic predictions for the EPR experiment.

Thoughtful feedback appreciated **(apyake@gmail.com)**.