

Review of: "On Bell Experiments and Quantum Entanglement"

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Potential competing interests: No potential competing interests to declare.

Your point, "the two fundamental hypotheses for scientific research, i.e., locality and realism, underlying the EPR experiment" appears valid to this reviewer with one issue. The term "EPR experiment" occurs in this paper 5 times. The EPR paper referenced presents a formal development, not an experiment. I did not find a reference to an EPR experiment in this author's paper. Since "EPR experiment" is contrasted with Bell experiments, which are well referenced, it should be defined or referenced.

The Bell inequalities are not "physically meaningless". See N.D. Mermin, Bringing home the atomic world: Quantum mysteries for anybody, American J. Phys. 49 (1981) 940–943, available at:<https://physlab.lums.edu.pk/images/e/e3/Reading2-QM2.pdf> The Mermin paper makes clear (IMHO) that the Bell inequalities have physical meaning. Which identifies that the local hypotheses in the EPR paper is not valid in fact, as Bell stated. Unfortunately this negates the arguments raised in this paper.

The blanket condemnation of: quantum computation, quantum communication, quantum teleportation, and quantum cryptography is extreme. Both quantum computation and quantum cryptography have a rigorous formal basis and significant experimental verification. Granted that quantum communication and quantum teleportation, if faster than the velocity of light transfer is assumed, are unlikely.