

Abstract Submitted
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How to Lead to the Demise of Schrodinger's Cat from a Distance with Spooky Action at a Distance and Spooky Action Not at a Distance: Three Null (Negative) Measurements and Information Transfer Faster than the Speed of Light, A Lot of Knowledge and No Measurements with Physical Interactions DOUGLAS SNYDER¹, Retired — This presentation shows just how far one can go in affecting the physical world without any measurements involving physical interactions (positive measurements). A null measurement that does not rely on a physical interaction is used to first measure one of two entangled electrons (electron 1). Information is instantaneously transferred (spooky action at a distance) upon the measurement of electron 1 to electron 2 for which there is also a null measurement. Both of these measurements and the instantaneous transmission of information involve knowledge. Second, a third null measurement leads to the demise of Schrodinger's cat. With a null measurement on electron 1, Bohr's defense of quantum mechanics is irrelevant: It is not necessary that there be a physical interaction between electron 1 and a physical measuring instrument that is fundamental to Bohr's version of complementarity for physics in order for the null measurement on electron 1 to affect electron 2. For Einstein, Podolsky, and Rosen, how can one argue for local hidden physical variables involved in measurement of electron 2 when there are no overt physical variables involved in a physical interaction in the null measurement on electron 1?

¹Please schedule my poster for Poster Session F 4 to 6 PM on Friday October 23.

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