

Abstract Submitted  
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**Wheeler's Delayed Choice Experiment Plus Entanglement: An Apparent Non-Local Effect on the Future with Control** DOUGLAS SNYDER, None — Wheeler's delayed choice (dc) experiment with an interferometer involving 1 photon is extended to 2 interferometers involving 2 orthogonally entangled photons, 1 photon traveling through each interferometer. Each interferometer has a polarizing beamsplitter (pbs) as the input beamsplitter (bs) and a 1/2 silvered mirror output bs. There is an apparent non-local effect on the future regarding the signal photon due to the dc for the idler photon distant from the signal photon. The dc concerns whether the output bs for the idler photon is: 1) left in place or 2) moved out of place before the idler photon reaches its output bs. The signal photon does not reach its input pbs until: 1) after the dc is made at the site of the output bs in the interferometer through which the idler photon travels and 2) the idler photon reaches the site of its output bs. A dc where there is interference for the idler photons results in interference in the distribution of the signal photons when the idler photon passes through its interferometer and is detected. A dc where there is which way (ww) information for the idler photons results in ww information in the distribution of the signal photons.

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None

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