

Abstract Submitted
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Causal Intuition and Delayed-Choice Experiments MICHAEL HEANEY, University of California, Berkeley — This paper proposes a resolution of the delayed-choice paradox of the Conventional Theory of quantum mechanics, where a particle seems to know what will happen in the future, and changes its present behavior accordingly. A comparison of the Conventional Theory with an Advanced Theory and a Symmetrical Theory of the same gedankenexperiment suggests that the apparent paradox is caused by an incorrect assumption about the interaction of a wavefunction with a beam-splitter. Once this assumption is corrected, there is no paradox in any of these three theories.

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