Delayed Choice with Haunted Quantum Entanglement for Choosing at a Distance an Overall Distribution Exhibiting Either Which-Way Information or Interference DOUGLAS SNYDER, None — Particles 1 and 2 are entangled at one of two possible locations (providing which-way info). The entangled particles physically separate from each other where one particle [P1] preserves the ww information that accompanied entanglement and the other particle's motion [P2] supports interference in P2's overall distribution due to the device setup. With this step, P1 now supplies which-way info to P2 due to their entanglement. Next, there is a delayed choice at a distance. Choice A: P1 and the ww info it carries are essentially lost by releasing many other particles of similar character to P1 into the container with P1 before P2 is detected and before ww info for P1 becomes available to the environment or an irreversible ww measurement is made on P1. (The entanglement is then lost and so is the ww info supplied by P1 to P2.) Choice B: P1 that carries ww info is not lost. (The entanglement is not lost and neither is the ww info P1 has supplied to P2.) Repeat runs of method with choice A 100 times consecutively to develop an overall interference distribution pattern for P2, or instead repeat runs of method with choice B 100 times consecutively to develop an overall ww distribution pattern for P2.

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None