Abstract Submitted for the NES19 Meeting of The American Physical Society

Untangling entanglement in quantum computers and a request for help JEFFREY BOYD, Retired — Comments made after an earlier version of this presentation (at the APS-NE meeting at Suffolk University a year ago) have become the central theme. The authors of a neutron interferometer experiment published in Physical Review in 1995 said that neither they, nor quantum mechanics could not explain their data. We propose a paradigm shift: that waves and neutron particles travel in opposite directions. There are two symmetrical ways of understanding Nature, with drastically different assumptions BUT THE SAME MATHEMATICS. The alternative view of Nature is called the Theory of Elementary Waves (TEW). When this paradigm shift was presented to APS-NE in 2018, someone in the audience said that from the viewpoint of quantum computation there is no difference between QM and TEW. This is the most helpful comment ever. Just as QM and TEW share identical mathematics, also they share the same quantum computer science, as we will show, using an IBM quantum computer in the cloud. As an outsider I again request help from the APS-NE. I need help in bringing an intriguing idea to a wider audience of physicists. I am NOT asking you to endorse this wild idea, rather that you be available to serve as a reviewer.

> Jeffrey Boyd No Company Provided

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