Quantum Knowledge Diagrams-2, Principles and Application

DOUGLAS SNYDER, None — The principles behind quantum knowledge can be extracted from the specific empirical implementations so that pictorial elements can be developed representing fundamental concepts of quantum knowledge. With these elements, one can represent quantum knowledge principles underlying specific empirical implementations more simply and in a way that allows for a more direct comparison of quantum knowledge principles underlying various specific empirical implementations. These representations are quantum knowledge diagrams. Basic diagram elements include: 1) a which-way process; 2) a non-which-way process (showing interference); 3) availability of the which-way or non which-way information to the environment, generally through detection, or lack of such availability; 4) particles; 5) entanglement, or lack thereof, of 2 or more particles; 6) delayed choice. Quantum knowledge principles underlying specific empirical implementations are developed and diagrammed.