Quantum Causality Threshold

FLORENTIN SMARANDACHE, University of New Mexico — Considering two entangled particles and study all the possibilities: when both are immobile, or one of them is immobile, or both are moving in different directions, or one of them is moving in a different direction. Then we study the causality between them and the paradoxes, which are generated. We define the Causality Threshold of a particle A with respect to another particle B. The Quantum Causality Threshold of the particle A with respect to the particle B, to be the space-time when neither A nor B is a cause for the other on the B space-time axis. To change the causality of a particle A with respect to another particle B one has to pass through non-causality, i.e. one has to pass through their threshold.