Superluminal Particle Hypothesis

Florentin Smarandache
The University of New Mexico

Submitted for the APR13 Meeting of
The American Physical Society

Based on Einstein-Podolsky-Rosen Paradox (1935), on a paper by Bohm (1951) and on Bell’s Inequalities (1964) we have emitted a hypothesis (1972) that there is no speed barrier in the universe and one can construct any speed smaller or greater than the speed of light. The reason is the following:

• suppose a certain physical process produces a pair of entangled particles A and B (having opposite or complementary characteristics), which fly off into space in the opposite direction and, when they are billions of miles apart, one measures particle A; because B is the opposite, the act of measuring A instantaneously tells B what to be; therefore those instructions would somehow have to traveled between A and B faster than the speed of light; hence, one can extend the Einstein-Podolsky-Rosen paradox and Bell’s inequalities and assert that the light speed is not a speed barrier in the universe;

• more, one can construct any speed, even greater than the speed of light (c), by measuring particle A at various time intervals;

• also, the information from particles A and B is transmitted instantaneously (thus, there is no speed barrier in the universe).

Florentin Smarandache
The University of New Mexico

Date submitted: 13 Dec 2012
Electronic form version 1.4