

**Title: A Non-Constant Separation of the Rockets Contradicts the Resolution of the Twin Paradox**

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**Abstract:**

The resolution of the Twin Paradox is well-known: during the traveler's (his) instantaneous turnaround, he must conclude that his home twin's (her) age instantaneously increases. But IF it's true that the two separated rockets in the Bell's Paradox (whose accelerometers show equal constant readings) DON'T maintain a constant separation, that CONTRADICTS the resolution of the Twin Paradox.

Here's how to see that contradiction:

Suppose we start out with him being separated and stationary with respect to her.

Imagine that, at the instant before he instantaneously increases his speed toward her, he is colocated and stationary with respect to the TRAILING rocket. And suppose that the LEADING rocket is colocated and stationary with HER then. (The rockets are unaccelerated before and at that instant).

When he instantaneously changes his speed with respect to her from zero to some large non-zero value, the two rockets instantaneously do the same thing.

During his instantaneous speed change, suppose that the leading rocket is ASSUMED to instantaneously INCREASE its separation from the trailing rocket. THAT would result in HER seeing the leading rocket INSTANTANEOUSLY move a finite distance away from her, WHICH IS ABSURD! So the ASSUMPTION that the separation of the rockets isn't constant CAN'T be correct.

Q.E.D.

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The above abstract says it all. If you want more, just read the abstract again. Feel free to contact me at the above email address if you have any comments or questions.