Abstract Submitted for the TSS14 Meeting of The American Physical Society

Accelerated Reference Frames in Special Relativity LIONEL D. HEWETT, Texas A&M University-Kingsville — One common misconception of Einstein's special theory of relativity is that it applies only to inertial frames of reference. Therefore, the resolution of the Twin Paradox is often explained by asserting that special relativity is valid only for the twin remaining on the earth and not for the twin in the accelerating spaceship. This presentation addresses that misconception, demonstrates that special relativity is certainly valid for accelerating frames of reference, and illustrates how the accelerated frame of the twin in the spaceship also resolves the Twin Paradox.

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Date submitted: 27 Feb 2014

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