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A Refutation of Special Relativity ERIC SAMUEL, George Mason University — This paper presents rigorous arguments in favor of the Newtonian principles of time invariance (TI) and mass invariance (MI), in contention with the special relativity (SR) principles of relativistic time dilation and relativistic mass. Firstly, those ingenious classical experiments in the phenomenological areas of (i) μ - and π -meson lifetimes (ii) the Compton effect, (iii) positron annihilation, (iv) electron motion in an electric field, (v) electron motion in a magnetic field, and (vi) the transverse Doppler effect, currently upheld as incontrovertibly supporting SR, have been remarkably reinterpreted within the context only of the Newtonian TI and MI principles, and without invoking SR principles. Secondly, several fundamental weaknesses of SR are delineated by careful analyses. Both the experimental and theoretical sets of arguments above lead to the inevitable conclusion that the Newtonian TI and MI principles alone are sufficient to satisfactorily explain known experiments. Crucial implications of excluding SR principles from the framework of fundamental laws, and restoring the universality of the Newtonian principles, will also be discussed.

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