Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

Reinterpreting Relativity's Negative Solutions: An Introduction to the Theory of Symmetry Physics B.G. SZABO — Using basic algebra, it can be shown that Einstein's renowned equation $E = mc^2$ is only half correct. Just as the equation: $x^2 = 9$ has two equally valid solutions, i.e. $x = +3$ and $x = -3$, there are two equally valid solutions to the useful relativistic equation: $E^2 = (pc)^2 + (mc^2)^2$, When the object is at rest ($p = 0$) $E^2 = (mc^2)^2$ or, as above $E = +mc^2$ and $E = -mc^2$ Furthermore, it can be shown that this negative solution is found throughout relativity. In general, there are two equally valid mathematical solutions to the Pythagorean theorem and this concept can be extended to the foundation of relativity – the Einstein hypotenuse. Are the negative solutions merely a mathematical curiosity or a fundamental physical reality? Current physics, discards the negative solution as not physically realizable. It is believed that this mathematically deficient practice results in physically "inexplicable" phenomena, e.g. the apparent matter-antimatter asymmetry, apparent CP violation, etc... However, by applying the basic premise of Symmetry Physics these phenomena have natural, experimentally falsifiable explanations: For all matter there exists equal but opposite antimatter. Or more precisely with deference to particle/wave duality: For every particle/wave there exists an equal but opposite antiparticle/antiwave. Further information can be found at http://www.symmetryphysics.com

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Date submitted: 26 Nov 2008 Electronic form version 1.4