INVARIANCE OF THE TETRAD POSTULATE AS A FUNDAMENTAL PRINCIPLE OF UNIFIED FIELD THEORY

by

Myron W. Evans,

British Government Treasury

(www.aias.us and emyrone@aol.com)

ABSTRACT

The tetrad postulate is proven to be an invariant of the general coordinate transformation in Cartan Riemann geometry. In Einstein Cartan Evans (ECE) unified field theory this inference implies that the ECE Lemma and wave equation are covariant in such a way that only the tetrad eigenfunction changes upon general coordinate transformation. The phase of the eigenfunction therefore changes by the addition of a dimensionless factor that is independent of distance and time. This factor is the origin of non-local effects in general relativity. There is no contradiction in concept between the local theory of general relativity and the non-local nature of this factor, because the latter is obtained by the fundamental principle of relativity, coordinate covariance. The invariance of the tetrad postulate is adopted as a fundamental principle to replace the gauge principle in ECE theory. A discussion is given of several experimental effects which can be described by this non-local factor, non-local in the sense that it does not depend on time and distance.

Keywords: Invariance of the tetrad postulate, ECE unified field theory, non-locality, coordinate transformation, general relativity.