

Abstract Submitted  
for the APR13 Meeting of  
The American Physical Society

**Empirical Evidence Suggest A Need For A Different Gravitational Theory** BENJAMIN SOLOMON, iSETI LLC — This paper presents some recent finding in alternative gravitational hypotheses. Using gamma-ray burst Nemiroff [2012] showed that quantum foam could not exist. Solomon [2011] showed that gravitational acceleration is not associated with gravitating mass, and equivalent to not knowing the photon source properties to know its frequency. Solomon [2011] showed that gravitational acceleration  $g$  is determined by  $\tau$  the change in time dilation over a specific height multiplied by  $c^2$  or  $g = \tau c^2$ . Force is expressed as a Non Inertia (Ni) Field and not by the exchange of virtual particles as is required by quantum & string theories. This paper examines 11 inconsistencies in physical theories that manifest from empirical data, to provide insights on how physical theories need to change to eliminate these inconsistencies. Exotic matter, expanding strings, a moving wave function and even a fixed spacetime continuum generate inconsistencies in physics. Further, our physical theories do not explain how particle probabilities are implemented in Nature. This paper concludes by proposing alternative axioms for spacetime and structuring particles that would be consistent with the Special Theory of Relativity.

Benjamin Solomon  
iSETI LLC

Date submitted: 07 Jan 2013

Electronic form version 1.4