

Abstract Submitted  
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**Quantum Spacetime A Phenomenological Approach** RICHARD CROLEY, University of North Texas Office of Economic Development and Technology Transfer — This is a first step of a program to build a model assuming metric spacetime changes at the Planck scale. These Planck scale metric changes can result in nonzero vacuum effects due to Planck scale quantum mechanical displacements that are analogous to elastic vibrations in solids. This approach results in test particle position and trajectories being spread out over time and non-zero quantum gravity effects.

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