

Gravity and the Superposition Principle

We use C.Kiefer's idea that QG means any theory in which the superposition principle (SP) is applied to the gravitational field. For masses above the Planck mass, we conjecture that the Schrodinger equation should contain the universal constant G and c , instead of the Planck constant \hbar . The wave packet expansion depends on G , c and the acceleration Gm/σ_0^2 , where σ_0 is the initial width of the wave packet. The source of gravity appears to be in superposition w.r.t. a freely falling observer

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