

How to Solve Dark Energy, the Cosmological Constant Problems and Unify General Relativity With Quantum Field Theory in 7 Steps

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(Dated: July 7, 2013)

I. INTRODUCTION

“...brevity is the soul of wit...” *Hamlet*

II. SIMPLICITY...OR NOT

A. Linearized Gravity

Take $g_{00} = 1 - 2\Phi$.

B. Changing the Metric

Change $\Phi \rightarrow 0$ as $r \rightarrow \infty$ and $\Phi \rightarrow \infty$ as $r \rightarrow 0$ to
 $\Phi \rightarrow 1$ as $r \rightarrow \infty$ and $\Phi \rightarrow -\infty$ as $r \rightarrow 0$.

C. Changing to a Quantizable Metric

Change $\Phi \rightarrow 1$ as $r \rightarrow \infty$ and $\Phi \rightarrow -\infty$ as $r \rightarrow 0$ to
 $\Phi \rightarrow 1$ as $r = (k_{distance})$ and $\Phi = |c|$ as $r \rightarrow 0$.

D. Cosmological Constant

Multiply the new $1 - 2\Phi$ by the “scalar” within Λg_{00} to get $\Lambda - 2\Lambda\Phi$.

E. Integration

Volumes within $\Lambda - 2\Lambda\Phi(r)$ are quantized out to a radius k . Λ are units of Planck mass and k is also a function of the number of units. $2\Lambda\Phi$ are units remaining.

F. Quantized Fields

All fields are quantized, even in radius of distance. Universal accelerating expansion occurs after average distance of this radius has been exceeded for clustered units of mass/energy.

G. Full Theory

Take $\Lambda - 2\Lambda\Phi(r)$ and place into Gunnar Nordström’s Theory. Normal energy density is the change in vacuum energy density and momentum is a change in vacuum energy-pressure. The QFT value of the vacuum energy density can easily be 10^{120} orders of magnitude larger than regular mass-energy since mass-energy is the *change* in vacuum-energy density.

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