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Wave Equation and AT Math

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Article Info

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Abstract

This paper provides some insight into Cosmological Constants and how they come from the well-known Wave Equation.

Keywords: Wave Equation; Gravity Waves; Density; Period

Introduction

The Wave equation has been around since the 18th Century when d 'Alembert discovered it. In this paper, I work through a few simple calculations for the universe as described by Astrotheology Math (AT Math) [1-2].

The Wave Equation:

$\partial^2u/\partial t^2=c^2\ \partial u^2/\partial x^2$

a=k s″

s=|E|t|sin θ

s′=(dE/dt)(dt/dt) cos θ

$s''=d^2E/dt^2\ (dt^2/dt^2\ (\text{-}\sin\theta)$

But $G=d^2E/dt^2$ from the Clairnaut D.E.

s″=G(1)(cos θ)

And,

$\partial^2u/^2dt^2=a=v=\sin 45°=\cos 45°=1/\sqrt{2}$

$1/\sqrt{2}=(-0.4233)(2/3)\cos\theta$

cos θ=2.993(6.67)=2

θ=114388

In θ=π

Or,

G=cos θ/c

G=cos θ/ [k a]

where k=π-e

a=v=sin 45 =cos 45

$\partial^2u/\partial t^2=c^2\ \partial^2u/\partial x^2$

a=c s″

Let E=t=1

$a=1/\sqrt{2}$

$c=2.99792$

$s=|E||t| \sin \theta$

$s=(1)(1) \sin \theta$

$s'=\cos \theta$

$s''=-\sin \theta$

$1/\sqrt{2}=2.99792^2 (-\sin \theta)$

$\csc \theta=127.3=\rho$ (Density)

Or $1/\rho=-\sin \theta$

$\partial^2u/\partial t^2=c^2 \partial^2u/\partial x^2$

$\int\partial^2u/\partial t^2=c^2 \int\partial^2u/\partial x^2$

$a=1/\sqrt{2}=v$

$v=\int a$

$c=2.99792$

$1/[\sqrt{2}\times 2.9979^2]=\partial^2u/\partial x^2$

$\int\partial^2u/\partial x^2=\cos \theta$

$\cos \theta=0.7856$

$\theta=0.667=G$

$1/G=1.5=$Mass Gap

The Laplacian

$\nabla^2u=\partial^2u/\partial x^2+\partial^2u/\partial y^2+\partial^2u/\partial z^2$

$\partial^2u/\partial t^2=c^2 \nabla^2u$

$1/\sqrt{2}=0.4233^2 \nabla^2u$

$\nabla^2u=394\sim396 =1/$Period T

Wave Equation:

$\partial^2E/\partial t^2=c^2 \nabla^2 E$

Rearrange to the Clairaut Differential Equation:

$c^2\nabla^2E- \partial^2E/^2t=0$

But we know:

$\partial^2E/^2t=G$

So,

$c^2\nabla^2E- G=0$

$E=Mc^2$

$=(-1)c^2$

$=-c^2$

$c^2\nabla^2E- G=0$

Aside:

$\nabla=\partial/\partial x+\partial/\partial dy+\partial/\partial z$

$=3(\partial/\partial x^2)$

$=3 \times (dM/dt)'$

$=3$ C

$c^2\nabla^2E- G=0$

$c^2 \nabla^2 E$

$=c^2(-c^2) \nabla^2$

Let C=3

$=-c^4$ C

$=-80.7$ (3C)

302 C

$=8.9875$

$=2.99792^2$

=Speed of light.

Conclusion

The wave equation shows where the mass gap, the frequency and the density as well as the gravity equation wave equation come from.

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Conflict of interest

The author declares that there is no conflict of interest.

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