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# The Ether: The Universal Material

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## Abstract

Here is a paper that discusses the new universal model based on the author's Astro-Theology series. The Reynolds Number is calculated for this universal material that comprises the Cosmos. The material has a Modulus of Elasticity called Cusack's Modulus of (Pi-e). The material exhibits characteristics of the common compound Beryllium Dichloride.

Keywords: Astro-theology; Cusack's modulus; Beryllium dichloride

#### Introduction

The universe was long thought by the Ancient's to be made up of "atoms" and the fluid they named "Ether". This idea was replaced in modern science with the notion of a vacuum. Modern Science was wrong. There is "ether". It is what I term here as "the Universal Material" [1]. In previous works, I call it the universal soil as it exhibits characteristics of Kaolinite Clay [2]. It is in fact, similar to Beryllium Dichloride as we see below.

#### Universal Ellipsoid

The Universe is, contrary to previous theories, expanding. It is not expanding, but rather, being compressed by a Force=2.667 which follows a sine curve (I will not be using units; just proportions for simplicity). The volume of the Universal Ellipsoid is 19905 (a 1X8 X22 or 3 X24 x 66 LY axis) [3]. Since the universal ellipsoid is like a flattened cigar, it has a hydraulic distance of an ellipsoid. In cross section (Figure 1), it is:

 $L = \sqrt{((3*300,000 km / LY^2) + (24*300,000^2))}$ = (\pi-e)=0.4233=cuz

## Universal Reynolds Number

The Reynolds Number is of course, the ratio of the inertial forces to the viscous forces and is given by the following equation [4]:

 $\mathbf{Re} = \left( \rho * \mathbf{v} * \mathbf{L} \right) / \mu$ 

Where,

- $\rho$  = density of the fluid
- $\mathbf{v}$  = is the velocity of the fluid
- **L** = hydraulic radius



 $\mu$  = dynamic viscosity

First, I've determined in my previous work that the Universal Mass =4.486.

Rho=4.486/(19905)

=0.000225~2.25

Second, the velocity of the fluid is where the force is given by the sine curve; and the momentum is given by the cosine curves which are coincident at [5]:

$$F = P = Ma = Mv$$

Or v = a

Or y = y' = y''

This conclusion leads to the Clairnaut differential equation as the fundamental differential equation of the universe (Figure 2):

$$dE^{2} / dt^{2} - E = 0$$
  
$$dE^{2} / dt^{2} = G E=G$$
  
$$E = 6.67 = G$$



Figure 2: The energy-time plot (Source: Astro-Theology Cusack's Universe [6]).

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From Einstein, we know  $E = Mc^2$ 

 $E = G = 6.67 = Mc^2$  and

M=1/81=0.123456779

 $667 = (1/81)c^2$ 

c =23.24~Ln π

Therefore, t=Pi in Figure 2.

So, the velocity and the acceleration of the universal fluid are: 1qusackian= $45^0=\pi/4$ rad

v=0.8415=a=0.8415 at

1qusackian=  $45^{\circ}=\pi/4$ rads

Where, sine and cosine curves intersect (Figure 3).

Third is the hydraulic distance,

 $L \sim 0.4242 = \pi - e = 0.4233 = cuz$ 

Finally,  $\mu = \rho * \upsilon$ 

 $= (2.25) (0886) = 0.200 \sim 19905$ 

(v=0.886=Plank's Constant=Poisson's Ratio)

So, plugging this into our equation for the Reynolds Number, we get:

Re = ((0.225) (0.8415) (0.4233) / (0.200) = 0.402

So, the Universal Reynolds Number Re = 0.402

## Hook's Law and Cusack's Modulus

When the inertial forces overcome the viscous forces (i.e., Re>0.402), then Shear Failure of the Universal Material begins to flow [6]. Refer to Figure 4 to see the Cusack's Modulus=cuz. This failure plane is the result when the Force=sin theta=sin 60 degrees. Refer to Figure 5 to see the failure plane and the Hooke's Law plot [7]. When energy is squeezed, it forms mass. The Resistance to Mass formation, Rm=0.4233 for the Universal Material (Figures 4 and 5).

Universal Material: Beryllium Dichloride and Its Failure Plane.

The Universal material exhibits characteristics of the common compound BeCl<sub>2</sub> illustrated in Figure 6. It acts like a spring absorbing the Force=sin theta, until the Energy is squeezed enough to cause rupture at F=2.667 or where the limit of "Cusack's Modulus" is reached [8] (Figure 6).













Figure 6: Beryllium Dichloride -similar to the ether (Source: Wikipedia).

# Why is Cusack's modulus (Pi-e)?

 $(\pi - \mathbf{e}) = (\mathbf{t} - \mathbf{E})$ 

But since the frequency of the human mind = freq/ =1/ $\pi$  = 31.8 Hz Then,  $(sin(-1)[(e^{\pi}) - LnPi)] = sin (59.47 \text{ degrees})$ 

$$= \operatorname{Sin}(1 \operatorname{rad}) = \operatorname{sin} t = \operatorname{Force} = 2.667$$

$$(Freq - G) = (\pi - e)$$

(Human Mind Wave) - (Gravity Wave = $(\pi$ -e) =Force

So, the human mind is tuned to pick up on the force that produces the gravity wave.

### Conclusion

So we see that the universe his imbued with an ether, or a universal material. It flows like a fluid when tit is subject to the critical shear stress. This is a new idea to modern science and is of great importance today.

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