



VIRGO EGO

European  
Gravitational  
Observatory



# THE ROTATING UNIVERSE

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Dedicated to profesor: **Jonah Kanner, Caltech**

## THE MAP; PROGNOSIS AND KEY QUESTIONS, THE CONSTANT, UP DATE

### Abstract

*All in the luminic universe rotate, planets, star, galaxies, black holes, but the same universe does not. But what about the universe with dark matter. Making an analogie with the event GW 150914 (GWOSC, tutorial 1.1, JONAH KANNER), the principal mass "M1" could be the collision concentration of boson galaxies (CCBG), "M2" the secondary mass, "our" universe of luminic material, one rotating on the other, with aligned spins, until the final merge.*

### Introduction

*The gravitational waves will be the proof, for the existence of "CCBG", the CDM will be a great bubble over all, but concentrate in "CCBG" in some place out there of the luminic universe, the LIGOS have to find a concentration of events, then single events will not be enough.*

### The Map

*A map of the universe with the possible locations for the CDM. With all the LIGOS in action ( may be 2024) all the universe could be covered, it will be possible to detect a GW confident events.*

### Developing of parameters

M1= 12.4 X e21 Solar Masses M2= 2.27 x e21 Solar Masses

D= 14,000 mpsc; CHIRP MASS= 4.32: MASS RATIO= 5.46 THE AMPLITUD . At 14,000 mpsc 1.25e-24 : 30 Htz  
Classic red shift=3.32, relativistic red shift= 2.31 ;14,000 mpsc

### Consequences

*The equation of KURT GODEL let the inclinations of the times cones and with the Lense-Thiring effect travel through.*

### USING THE KURT GODEL EQUATION

-  $\frac{1}{2} R g_{ab} = 8 \pi T_{ab}$   $T_{ab} = \rho U_a U_b$

$\rho_0$ =density of matter     $u_a$ = vector speed

### Tensorial Signature:

$$ds^2 = - dt^2 + dx^2 - \frac{1}{2} \exp(2 \times \text{sqr } 2 \times wx)$$

$$dy^2 + dz^2 - (2 \times \exp(\text{sqr } 2) \times wx) \times dt dy \quad (1) \quad \text{sqr} = \text{square root} \quad w^2 = 4 \times \pi \times \rho_0 \quad \text{Estimated parameters:}$$

Taking eq. (1):  $r = \log(1 + \text{sqr } 2)$

### CCBG 1

$r_a$ = between 18 and

36 degrees,  $dec = -25$  and  $0$  degrees, for the lensing effect it could be a reflex image in  $r_a = 18-36$  degrees,  $dec = 0-25$  degrees. 60 % probability

CCBG 2  $r_a = 90-108$  degrees,  $dec = 50-75$  degrees. 20% probability

CCBG 3  $r_a = (-144)$  and  $(-126)$

degrees,  $dec = (-50)$  and  $(-25)$  20% probability.

I do not pretend be exhaustive nor exact. Is not a computing outcome, it is an artistic representation.

The hypothesis is that in the origin the CDM will be in the dark and cold zones of the Background Radiation, then superimpose the Infrared Zones, after the x Ray zones and finally the main Luminic, objects. All those places than still are cold and dark must be the site of CCBG clusters.

### KEY QUESTIONS AND ANSWERS

#### Entropy

All the order that are losing the universe now, where does it come

From the remains of the previous luminic universe

Is the big-bang the origin of space-time?

No, is the merge of the previous luminic universe and the eternal CDM

Problem of proportionality

**Why there are 5% of luminic universe matter, and 95% of CDM**

**In all GW events confident there is 5% of energy remaining in the merge, the necessary for making the new luminic universe and keep 95% of CDM**

**The constant, 215 FM= 502.4 M1=311.56 M2=216.49 M1+M2= 528.05**

**502.4/528-05= 95.14 roughly 95%, 5% for the new luminic universe**

**All those interested in the map ( GW events,: Luminic Important Sources, : Strong X Ray Sources: Infrared Sources, RA,DEC, RS, distances) you can ask it to: [luisconsultor@yahoo.com](mailto:luisconsultor@yahoo.com)**

**Expansion of universe**

**Is the great GW resulting of the merge luminic universe and the CCBG, that will propagate and expand in the new universe (ring down)**

**Thermal end of the universe**

**Answer**

**There will be no such end, but a merge luminic vs CDM, will be a new luminic universe and eternal CDM.**

**UP DATE**

**CONSTANT 5%**

**With events 2015,2019 the constant 5% is now**

**(5.25-3.63) with one sigma.**

**TIMES OF THE BARYONIC UNIVERSE**

**The Q-transform graphic , the time between 2 valleys are: t inspiral**

**after .30s= .025s;**

**t inspiral one cycle before merge=0.15s; t merge => 1E-3; Q-transform**

time from .30 with .42 s merge time.

T=time for CDM-Baryonic Universe and  $t_i$ =inspiral,merge,  
ringdown time in GW150914. Then:

$$T = .2216 E^{21} \times t_i \quad (1) \quad t_i = 4.51 E^{-21} \times T \quad (1')$$

T inspiral after .30s=175,000 million years (2).

T ringdown = 175,000 million years (3).

Probably we are in this expansive young face of the universe T .inspiral before 1 cycle to merge= 105,000 million years (4) T, inspiral 4 intermediates before 1 cycle of merge 702,000 million years (5). For the crunch time:

$$TC = .92T(2) + T(3 \dots 5) = 1,144,882 \text{ million years}$$

Other times of interest.:

Planck Time  $E^{-43} = 4.51 E^{-64} t$  merge

Great Unification Time  $E^{-36} = 4.51 E^{-57} t$  merge

Cosmic inflation  $E^{-33} = 4.51 E^{-54} t$  merge

Making of stars 250 million years=  $3.6E^{-5} t$  merge-ring dawn

**SCHWARZSCHILD FACT**

$$R_s = 2GM / (c^2): \quad 5R_s \times MT = E^{26}m ; 14,000 \text{ MSPSEC} = E^{26}m$$

**KEPLER LAW**

$$T = 4\pi r^3 / (G M_{tot}) \quad (r \times r \times r)$$

$M_{tot}$  = total mass, CDM + Baryonic matter  $G$ = Newtonian Constant

$r$ = distance between masses, 14,000 megapars

The outcome is of the order of  $E^{18}$ , in the analogy model is  $E^{18}$ .

The Analogy Model Principles

Never nothing comes from nothing .

The Big-Bang as a beginning of all and the thermal death as a finish is a myth.

Always will be a Universe before and after with a major component of CDM.

The baryonic matter will be less in every Universe until will remain only eternal CDM.