

Analysis of global galactic group dynamic for finding main reason of abnormal closing of Andromeda to our galaxy

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:Abstract

Z parameter of Andromeda measured -0.001001 and it is closing us with 110 km/s otherwise the normal character that it might be 46.8 km/s escaping. however there is not direct observational signs mentioning two galaxies relations on the case considerable gravitational and absorb between them, we noticed poor judgment remarks in this phenomena and decided to review to find possibility of finding new approaches may be able to explain such observational fact. Either all cluster members obey universal red shift or whole our cluster come to be farther than the other large scale structures ,we established gravitational binary model to . show that those two neighbor bodies are rotating round common center

key words :cluster, Andromeda, Hubble constant ,world expanding , gravitational binary

Introduction

All the thing which we can say about the universe ,cosmology and world formation history and process is based on what we imagine and write scenarios on third step of analysis , the third step is that how and what we thinking , imagining calculating and supposing about “the inertia basement, entropy ,first law of thermodynamic ,world expanding modeling ,world density ,universal large scale structures acceleration ,with the term Hubble constant” . First two steps are coming from observation and measurement ,we have good data base for CMB and in the case Red Shift of galaxies and clusters . The standard model based on big bang .supports both of these fundamental phenomena

I will discuss about Third Step in an another work ,where it is about Galactic .Rotation against dark matter and dark energy

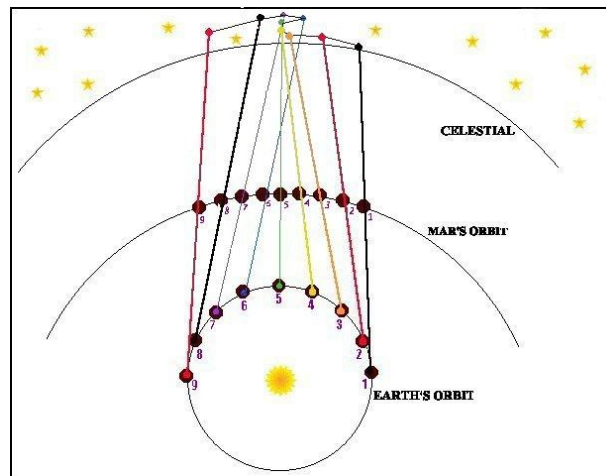
We noticed any abnormal known case in global galactic group, named blue shift of Andromeda -which had been observed by Muslim astronomer Abdu Alrahman Sufi at 964 AC- or M31,can we say there is no problem ? and not any ?abnormal event in case milky way and M31

We can approve that if you were in supper cluster Harlow Shipley and others ,you had to impact similar case of red shift . In fact we found the redshift of . two neighbor galaxies is fully natural

Mars ,Venus and Mercury are rotating together with earth round sun ,thousands of years man was thinking Mars and Venus do backing somewhere in .their orbital , and could display it with rotating further circle's round

Nowadays we know in sun centered orbital bodies are closing and going farther periodically, with any worried sense of impacting with earth ,furthermore several dwarf planets or meteorites are rotating in close to or orbital or pass and

don't hit us. So the sun and solar system are escaping from Orion and closing to
.Vega



May two galaxies pass common point, but in different times ,or galaxy and
. andromeda have some surrounding dwarf galaxies

$$Z=H_0^{-1} \rightarrow \text{distance of two bodies} = 0.7 \text{ Mpa}$$

$$\text{Normal } Z=0.00235$$

!Local galactic group

We have Andromeda and milky way , NGC6822 ,M32, Triangle ,NGC3109,Wolf
and others , about 40 galaxies ,two heavy members have about $10^{11} M_o$ then it's
mass in sum $2 \times 10^{12} M_o$

Radius of our cluster is about 5 million light year ,mean density of such group

$$= \rho$$

$$M_o = 2 \times 10^{30} \rightarrow \rho = 7.64 \times 10^{21} / 10^{48} \quad \text{kg/m}^3$$

$$\rho = 7.64 \times 10^{-27} \quad \text{five hydrogen atoms per cube}$$

.meter ,it seems to be so that the system is semi cylindrical

local group center of mass located between Andromeda and us , same as a

binary ,gravity field amplitude is in range 10^{14} kilo Newton

Bending factor of system:

If it be really so that Andromeda is closing to impact us ,then whole system might shrink .Shrinking of system not detected yet. Together with there is no signs of such event.

Detecting of system center of mass location will say us something about the scenario of being to bodies a binary. Whenever it results that they never impact each other and they are orbiting round co ordinate center .

Detection of co ordinate center for local group solved with simulation ,Together with noticing that when the milky way be one member of a binary we might correct all our measurements in case world expanding ,because of that we have gravitational accelerated movement.

We need observational data for velocity of Andromeda relative neighborhood bodies.

Binary system sidereal rotation

Dynamic of binary system can be noticed to never considered phenomena I name it binary system sidereal rotation dynamic . we used to only calculate period and cinematic and dynamic of only rotation of binary system round common center .

When they be own gravity shaped or formed bodies , normally they will rotate round their own symmetric axis tidal or released , we know that two different unequal bodies wont have same relation.

For spherical or ellipsoid bodies with radius r sidereal force can create angular momentum for tiding body on orbital .

For Newtonian gravity , two galaxies will accelerate and increase its own velocity at Keplerian perihelion. Two bodies center of mass locates at $0.5M_{\text{pa}}$ from our one , $0.25M_{\text{pa}}$ from M31 ,bout not between them. Milky way's radial rotation speed is one radian per80 million years. $\sim 38\text{km/s}$

$$2 \times 0.8 \times 10^{11} M_{\odot} \times 8 \times 10^{12} = 2.56 \times 10^{51} \text{ t.m}$$

in the other hand $V = \sqrt{2G(M_1 + M_2)/r} \rightarrow 38^2 = 2 \times 6.67 \times 10^{-11} \times 2 \times 10^{30} / 3.14 \times R$

$$R = 0.8 \text{ Mpc}$$

1.2 billion years needed for backing this location again.

In the such case we will approach the M31 at perihelion may 0.3~0.35 Mpc
At the distance tidal bending will be in 10^{16} kilo newton and it is unable to destroy M31 or milky way.

Then the measured speed is only relatively radial closing and doesn't show other thing.

Conclusion

In conclusion we only advise review in two galaxies displacement relative to other members of cluster.

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