

Disproof of the BIG BANG.

**\*)The Location of the BIG BANG cannot be determined.**

George Lemaitre first noted in 1927 that an expanding universe could be traced back in time to an originating point. Since then science has build on his idea of cosmic expansion. If you now ask a scientist where the location of the big bang was they say ``It happened everywhere simultaneously`` which is greatly deviating from the original idea.

But they need to say this because they cannot point to a location. But if all is expanding from all then why are we pieced together. Does gravity overcome this BIG BANG concept? Then math should be readdressed I guess.

According Science The observable universe is 45.7 billion years. You can watch 13.8 billion in any direction. But observation itself falsifies big bang. Why does light that has been emitted from a star 1 billion years ago reaches us at the same time as light emanated from a star 10 billion years ago if the big bang happened everywhere simultaneously? Aren't these stars in a different stage in their life when they've emitted these photons?

**\*)Current Fusion model of the star vs. the big bang.**

Current day fusion models hold that stars burn up their fuel so they decrease in luminosity. They decrease in the Herzprung Russel diagram.

``A mid-sized yellow dwarf star, like the Sun, will remain on the main sequence for about 10 billion years.``wikipedia.

Okay lets go for wikipedia being right for the time being. Then why are there mid-size yellow dwarfs at the edge of the universe at 13 billion years ?

The light of these stars could not have reached us yet in time cause our sun will be burned up in 10 billion.

When we look up to the night sky we are looking at the past.

The ONLY way we can explain light reaching us after 13 billion years is that the little yellow dots we look upon at 13 billion lightyears is that they are formed at least 3 billion BEFORE our sun started in its main Herzprung Rusell sequence.

This falsifies the big bang. There is no such thing as simultaneous in the Universe.



Called the eXtreme Deep Field, or XDF, the photo was assembled by combining 10 years of NASA Hubble Space Telescope photographs taken of a patch of sky at the center of the original Hubble Ultra Deep Field. The XDF is a small fraction of the angular diameter of the full Moon. Image released September 25, 2012.

*Credit: NASA, ESA, G. Illingworth, D. Magee, and P. Oesch (University of California, Santa Cruz), R. Bouwens (Leiden University), and the HUDF09 Team*

A picture from 13.2 Billion lightyears away from us. Do you truly believe these galaxies are formed a couple 100 million years after the Big Bang? Do you truly believe these galaxies simply popped into existence in a flash?

From NASA`s website: ``Magnificent spiral galaxies similar in shape to our Milky Way and the neighboring Andromeda galaxy appear in this image, as do the large, fuzzy red galaxies where the formation of new stars has ceased. These red galaxies are the remnants of dramatic collisions between galaxies and are in their declining years. Peppered across the field are tiny, faint, more distant galaxies that were like the seedlings from which today's magnificent galaxies grew. The history of galaxies -- from soon after the first galaxies were born to the great galaxies of today, like our Milky Way -- is laid out in this one remarkable image.`` Galaxies in their declining years plus 13.2 billion lightyears apart from us. Yet science claims the universe is 13.8 billion.

From a low-mass star perspective:

``What happens after a low-mass star ceases to produce energy through fusion has not been directly observed; the universe is around 13.8 billion years old, which is **less time (by several orders of magnitude, in some cases)** than it takes for fusion to cease in such stars.`` Taken from wikipedia.

Our current day understanding of stellar timelines state that there are processes in the universe exceeding big bang timelines. Far exceeding.

So both on the start of the process as well on its ending there could never been a big bang.

Are our current fusion models wrong or is big bang wrong?

**\*)Colliding.**

If You observe the galaxies you notice they form clusters of stars. If the big bang happened everywhere simultaneously why don't we see evenly distributed stars throughout the entire universe? .No, instead we see cluster formations. We take this thing from an even bigger observational point of view we see entire galaxies colliding with one another. We are on a ``head on`` collision with Andromeda in Billions of years.

Science has ``overcome`` this observation by stating the big bang works on larger scales and not in close vicinity. But can we speak of close vicinity. We are talking lightyears here!!.

So if object lightyears away from one another can overcome big bang then what is this concept worth?

**\*) POWER.**

How much power had the BIGBANG to distribute galaxies everywhere. There are laws of conservation of energy. One type of Energy can always transfer to a different type of energy. Can a scientist please in simple terms explain to me what object had enough power to emanate such energy to create the entire known universe. Please don't come up with a new GOD particle. Do not blend religion with science. In science we point to objects not religion. What **object** had  $9.5 \times 10^{53}$  Megatons of TNT power? Energy is what objects (can) do. Energy is a concept not an object.

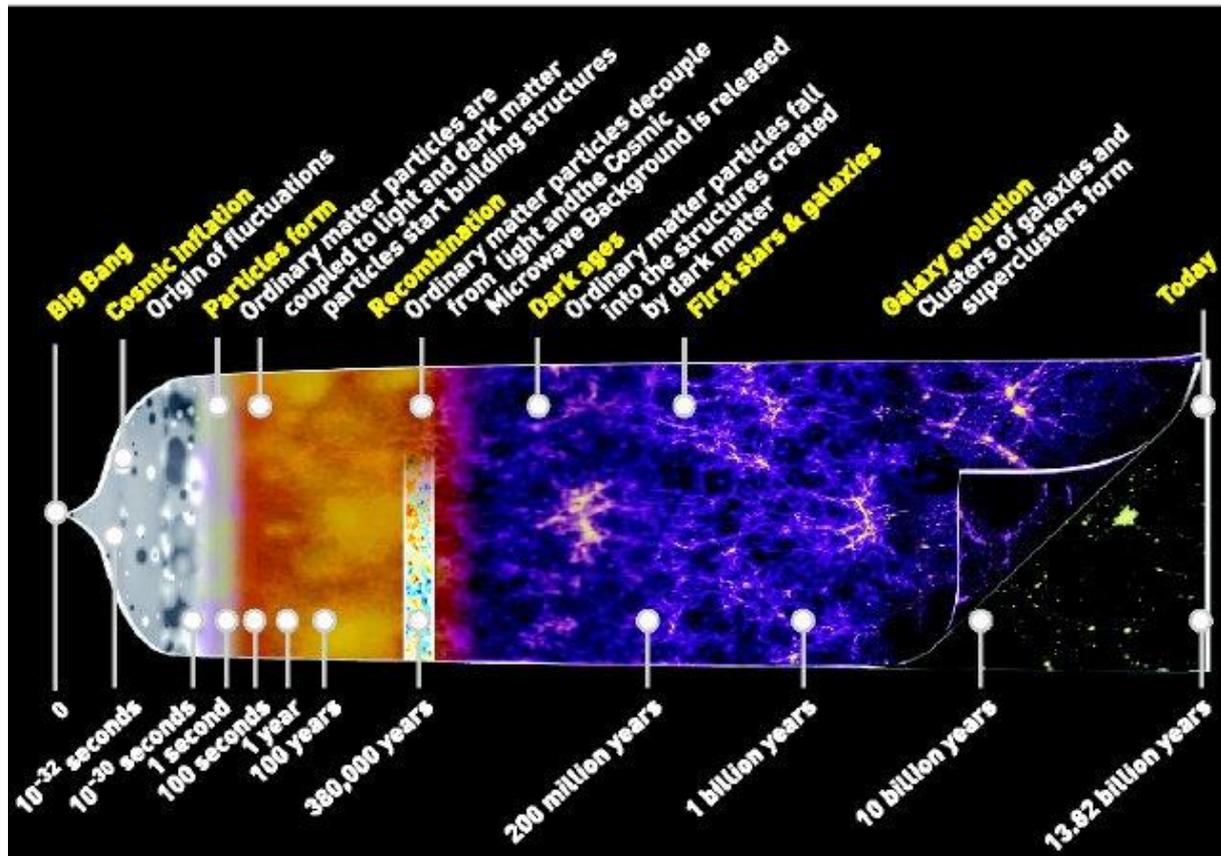
The big bang is a **DIRECT** violation of the first law of thermodynamics.

``The **first law of thermodynamics** is a version of the law of conservation of energy, adapted for thermodynamic systems. The law of conservation of energy states that the total energy of an isolated system is constant; **energy can be transformed from one form to another, but can be neither created nor destroyed.**`` wiki.

Big bang uses ``energy`` to create the entire known universe.

Note: For the math guys: If the big bang started with an infinite universe what is the point of expanding? Infinity expanding into infinity makes no sense. So it had to start as a closed system hence it is in violation with the first law of conservation of energy.

\*)Sequence of the BIG BANG event.



The sequence of BIG BANG doesn't make rational sense.

BEFORE the BIG BANG.

What was before the big bang? Space-> no there was no space, matter ->no there was no matter, Time-> There was no time either ,energy-> yes tons of it. This is not what I am claiming this is what science claims and if questions about it are raised then these are ``irrational`` questions according to current day science.

INFLATION.

``The earliest phases of the Big Bang are subject to much speculation. In the most common models the universe was filled homogeneously and isotropically with a very high energy density and huge temperatures and pressures and was very rapidly expanding and cooling`` wiki.

\*) How do you fill something with ``energy``?

\*)How do you make `` energy`` dense?

\*)  $E=mc^2$ . Energy is the capacity of mass to do work. These 2 are interconnected. If matter increases so does energy. (because c is the light speed constant). If matter decreases so does energy. You cannot have an E without the m!! Albert Einstein's famous equation falsifies the big bang!.

Nuclear energy is what matter does.

Mechanical energy is what matter does.

Heat energy is what matter does.

Magnetism (magnetic energy) is what a magnet (matter) does.

Electric energy is what matter does (it loses an electron and adjacent matter gains one, classic)

Light (EM energy) is what ionized matter does.

Kinetic energy is what matter does.

Potential energy is what matter can do.

Need to continue? Here we have ``energy`` without matter (still needs to form after the big bang).

\*) Temperature and pressure is what atoms and molecules do ,not what ``energy`` does. Atoms and molecules can have energy yes, but they were not around.

\*) Where was and is the universe expanding into?

\*) Why did it cool (because it got bigger)? Is distribution not a better word instead of cooling.

Some models prefer to speak of a very high plasma density at the very beginning.

But a Plasma is an ionized gas.->

So we have an ionized gas (atoms) that forms particles to create atoms. What came first the atom or the atom? Why does an atom form particles to form an atom? Where did the high density plasma came from in the first place? Did all the gluons in the universe stick it up in a big universal contraction?

PARTICLES FORM.

What particle simply pops into existence? Whoops there it is.

The way we have been making particles at particle accelerators is to jack up the speed of ionized atoms (for example a proton)and smash those into other atoms releasing particles. We can detect the event in a bubble chamber. But here in our big bang universe they simple pop into existence like magic. They have ``spacetime`` make up particles and antiparticles in equal amounts.

``*Dark matter* is a hypothetical type of matter`` wiki. They have invented something that will make their math equations work. Sorry science you can't invent a new type of matter. This is unscientific and dark matter has never been observed.

``The standard model of cosmology indicates that the total mass–energy of the universe contains 4.9% ordinary matter, 26.8% dark matter and 68.3% dark energy. Thus, dark matter constitutes 84.5% of total mass`` wiki. Look at that!!!. Almost 85% of the universe is missing in action and can't be found because it is hiding from the EM spectrum. Well isn't that convenient. Math truly works.

## LIGHT COUPLING/DECOUPLING.

``Whut?``. Has light become a transportation device here ? Beam me up Scotty? Man these guys are looking at too much sci-fi these days. Traveling through wormholes from one big bang to another.

If you think I am kidding here then you are wrong by the way. They have one big banged up universe truly stuck to other big banged up universes through wormholes. This is real serious shit. Its current day astronomy.

## DARK AGES.

``At about  $10^{-6}$  seconds, quarks and gluons combined to form baryons such as protons and neutrons. The small excess of quarks over antiquarks led to a small excess of baryons over antibaryons. The temperature was now no longer high enough to create new proton–antiproton pairs (similarly for neutrons–antineutrons), so a mass annihilation immediately followed, leaving just one in  $10^{10}$  of the original protons and neutrons, and none of their antiparticles. A similar process happened at about 1 second for electrons and positrons. After these annihilations, the remaining protons, neutrons and electrons were no longer moving relativistically and the energy density of the universe was dominated by photons (with a minor contribution from neutrinos).``wiki.

If matter meets anti-matter its BOOM. They counter each other and therefore annihilate upon contact. The process is called annihilation.

This is not yin/yang keeping everything in balance. No ZEN Buddhist can help you out when you get annihilated.

If just as much matter as antimatter would have formed we would not be living in this universe.

We wouldn't call it the dark ages but the age of light and fire.

## **\*)Mathematical errors.**

Wrong assumption ``Box`` thinking. In mathematics we put everything inside a little box. Why? Because it makes things easy to calculate. Math is a tool to quantify and predict. But can you truly quantify and predict the galaxies? The amount of stars in our solar system is over 300 billion. Try counting to 300 billion. Maybe you can predict where one star is going but if it passes close to another star its gravitational interaction will alter its trajectory. It is one big chaotic mess out there.

There is no way you can reverse engineer mathematically everything to a starting point. Therefore one cannot point to a location where such an event happened.

They've put the entire universe in a box stating that there is a homogeneous thermal equilibrium in place. Basically they've stated everything is equally warm everywhere (i.e. the word homogeneous). But is the Earth as warm as the sun. Is it as warm as Jupiter or Pluto? No. We are dealing with a heterogeneous system and lots of math with it goes right out the window. From a thermal perspective it might work to look at a star or planet as a closed system to get an approximation of what is going on but we never can truly grasp the entirety of things happening.

**See attachment 1.** Mathematics of the big bang by the UCR math department. The math isn't wrong. They've provided good math but look at the assumption -> conclusion. It's a bit how this scientific world operates today. The general relativity priest(ess) says it is so... But once you look at the assumptions it might be smart to understand that wrong assumptions can lead to the wrong conclusions.

My hope lies in the future that science will be conducted on the basis of observation and finding relations within these observations. Not on the basis of assumptions.

#### **\*) Timeline**

``Detailed measurements of the expansion rate of the universe place the big bang 13.8 billion years ago``. Science claims the Universe is 13.8 Billion years old.

I have huge problems with 13.8 billion years.

One is called radioactive decay. Radioactive decay is the process by which an unstable nucleus loses energy by emitting radiation. Its according quantum theory that it is possible to predict when a particular atom will decay. This is the basis of radiometric dating. The half lives of radioactive atoms span from nearly instantaneous **to far longer** then the known age of the universe.

Yes boys and girls as previously discussed with fusion there are processes in the universe that far exceed the known age of the universe. Isn't this weird? It is like stating a fire is burning but the wood for the fire was not grown, nor the forest to produce the wood, nor the soil to grow the forests, nor the air to burn it or the temperature to make it burn. Nor the planet.. nor the galaxy..

If I put my money on a theory I think I will go for the quantum guys.

Another problem I have with the big bang is time itself.

#### **\*)Time.**

Time is a concept . It's a reference frame between two speeds of objects. It is what clocks do.

But because a clock does what it does you can understand time. The velocity of the clock alters the velocity of the objects it touches. Some clocks produce a nice calming sound. Tik tak.Tik tak. The velocity of the clock always alters the velocity of neighboring objects. For example the air it touches.

One object in motion will always affect another object and give it motion. Just look at objects in the vacuum of interstellar space. Because there are objects in motion there can never be rest. if colliding forces are in equilibrium objects can shatter. It will lead to smaller objects in motion.

Stating time was not there before the big bang (current theory) is like stating there was no motion before the big bang. Can you imagine motionless ? It is really beyond my imagination. Imagination i only can have because objects in my brain are in motion.

The first point I am making is that time was always around. The second point is that time from a universal perspective is insignificant because of the sheer size of the universe.

On small scale : velocities of objects are very fast relative to other objects. For example :The running of an ant compared to a grain of sand in close vicinity. But at very large distance? let`s say the other side of the world. Who cares whether the ant has high velocity in relation to the grain of sand? Its rather difficult to see which one moves at all. The distance of the observer is so large that it becomes insignificant to the running event and therefore time itself becomes insignificant. The reading of the (ant vs the grain of sand) clock will become obsolete.

Now stars do move at huge velocities but **distance** wise to other stars (and so timewise) they have far less significance in comparison to one another. The reference frame time has no longer significance. Therefore the universe is eternal.

The next youtube video made by Baz Taylor and Jeffrey Wolinsky shows the scale up of distances of objects in the Universe rendering time insignificant.

<https://www.youtube.com/watch?v=oaSXWHYguAk>

#### **\*)Reaction rates in space vs big bang timeline.**

Current astrophysics teachings state that planet Earth formed out of molecules created in outer space. It takes on a dust grain in outer space 60-80 million years for a molecule to form. (I have heard this in a speech so don`t pint point me on the exact reaction rate times in space, I hope the reader takes its time to look these things up themselves)

So since the beginning of time 13.8 billion years ago (Big bang) a total number of 200 molecules could have been formed per dust grain floating around in space. I think it should take an awful lot of dust grains to produce a planet the size of Earth. One thing Astro got things wright is that the dust grains are produced by stars. But how fast this formation processes are is not said. So even the material to perform the reaction on in outer space has to be created first (in billions of years). You get my grip?

#### **\*) The ``fabric`` of space.**

Big bang is expanding emptiness. You ask a 4-5 year old boy or girl to bend the content of an empty glass you will probably get a far more sane answer then many current day scientist. Yet we assume science knows it all. In current Science they state space is empty and it can be expanded and that that expansion is accelerating rapidly. How can nothing accelerate?

Nothing is speeding up. Because nothing is nothing. Nothing is that what defines empty. It is from one border of an object to another border of an object in which resides no object. That what does not exist. It comes from the words :Not a Thing. Nothing.

No Object. Zip. Nada.

Yet science has turned it into a thing. And its rapidly expanding so brother watch out.

**\*) Why time is not a dimension.**

Another disaster strook called spacetime. They took time as a dimension. There are only three dimensions my dear. Length, width and height. And only objects can have dimensions. Time is a reference frame. Not an additional dimension.

For further explanation I gladly refer to you to mr. Bill Gaede`s work on youtube.

<https://www.youtube.com/watch?v=tI9lijxigY>

**\*)Explaining redshift/Back ground radiation.**

The big 2 evidences out there for big bang believers are 2 and they are simple to falsify.

-)Back ground radiation.

Because one object is in motion there will always be other objects in motion. Hence there is background radiation. Big deal. Is this evidence for expansion? Nope.

To prove a motionless state before the big bang, science is pointing to background motion of the universe. Let that sink in.

-)Redshift.

For redshift explanation I would like you to refer the next youtube vid:

<https://www.youtube.com/watch?v=LVMnLc7zlqI>

For a more scientific (measurable approach) I gladly refer you to Eric J. Lerner's et al work called

Evidence for a Non-Expanding Universe: Surface Brightness Data from HUDF. It's a 15 pages pdf file on the internet.

**\*) Meteorite and moonstone dating.** They've altered carbon dating and went to uranium dating on meteorites. Do you know why? They could not carbon date the meteorites. There is a level cap on carbon dating as there is a level cap on Uranium-lead dating. ``The carbon-14 dating limit lies around 58,000 to 62,000 years.``wiki. The cap for Uranium lead dating ``can be used to date rocks that formed and crystallized from about 1 million years to over 4.5 billion years ago``. wiki

Basically anything before 4.5 Billion years ago cannot scientifically be proven or disproven.

There is however a ratio determination between Uranium and Thorium that might shine a little light on the true age of the moon. The Japanese space agency measured these elements via their Kaguya spacecraft.

These measurements of Uranium and Thorium can be found in the following link and are made available for public :

[https://www.researchgate.net/publication/248816035\\_Uranium\\_on\\_the\\_Moon\\_Global\\_distribution\\_and\\_UTh\\_ratio](https://www.researchgate.net/publication/248816035_Uranium_on_the_Moon_Global_distribution_and_UTh_ratio). They didn't make a U/Th ratio map which is a pity.

What they did make is a graph showing the Thorium amount measured from the front side of the moon in relation to the back side of the moon. Uranium didn't differ more than 10% over the entire moon but on the back side there is only 25 % (graph area) Thorium vs the front.

If the moon is dated via the front we are talking 4 billion years ago. If the moon would be dated via the back of the moon we are talking older than the known universe (13.8 billion years).

I don't know why there is such a huge age difference from front area to back area of the moon. Maybe the moon hit the Earth, a meteorite struck this side or an advanced moon civilization blew up their nuclear reactors 4 billion years ago. To me this is just huge speculation so I leave it to the imagination of man.

### **\*)Underlying psychology of the big bang.**

Further understanding why this BB concept is such a mess.

#### **POINT 1. CENTER.**

Humanity has always placed itself in the center of its own existence.

I stood at "the end of the world" on a holiday in Portugal a decade ago. It's a nice place to visit and you indeed observe a weird curvature looking at the horizon giving it a "you are going to fall off the world feeling". That was once the general perspective of many people in the old kingdoms. Hence the name "end of the world".

It took adventurers /discoverers to falsify that perspective. The James Webb telescope that will be put into orbit will be our discoverer to falsify big bang.

But even if we start comprehending more about the universe people will still believe that we are at the center of everything.

The center of the world was once in Europe, once the Earth (everything revolved around it), once our solar system ( About the time when this big bang concept was born),once our milky way and now we are at the center of our observation.

The big bang places Humanity at the center of the observable universe. I think there are some people who don't even read the word observable at all.

Maybe it's the feeling of almightiness that requires societies to work. They state: GOD created us in his image.

Placing yourself in the center of everything is a really bad thing. It closes the mind.

POINT 2.GESTALT PSYCHOLOGY. We humans look at a room, see the objects in them, and attempt to correlate all individual objects together as part of one whole. Instead of focusing on the objects and understanding the constructs of these objects we immediately assume they have a connection to one another because they are in that same room. I think these thought errors also moved into astronomy as we want to focus on the bigger picture like how our solar system is comprised or how

the universe is constructed. We want to correlate everything to a (preferably the same) starting point. Yet the very construct of the universe could be cyclical and very different than previously thought. What if hydrogen/helium clouds get ionized by distant stars and that ionization will subsequently lead to new stars? Cyclical thinking will lead to my next point.

### POINT 3. CYCLE.

All living things have a birth/death cycle. Birth and death are the concepts that impact people the most in their minds. If humans live/die why does not the universe live/die?.

People once took that question to priests who needed an answer from a religious perspective.

To give it closure in the minds of many they formed a god popped all in existence answer. One that is still admired today. Hence we are stuck with the bigbang concept that is generally accepted by the multitudes but not by me.

Sources used for this vixra paper:

Wikipedia.

NASA website( Hubble space telescope).

UCR math department.

Bill Gaede`s youtube channel (on bigbang,time).

Jeffrey wolinsky`s youtube channel.

Website of JAPANESE Space agency :JAXA/SELENE <http://darts.isas.jaxa.jp/planet/pdap/selene/>.

“KAGUYA (SELENE - The SELenological and ENgineering Explorer).” Copyright © 2017 Japan Aerospace Exploration Agency. All rights reserved.

Eric J. Lerner et al. Evidence for a Non-Expanding Universe: Surface Brightness Data from HUDF.

Note: Special thanks to the JAPANESE Space agency. Their graph is copyrighted and cannot be used for commercial usage unless approval is provided.

## Attachment 1 . Math of the big bang.

### The Big Bang

We can also derive some basic facts about the big bang cosmology. **Let us assume the universe is not only expanding but also homogeneous and isotropic.** The expansion of the universe is vouched for by the redshifts of distant galaxies. **The other assumptions also seem to be approximately correct, at least when we average over small-scale inhomogeneities such as stars and galaxies. For simplicity, we will imagine the universe is homogeneous and isotropic even on small scales.**

An observer at any point in such a universe would see all objects receding from her. Suppose that, at some time  $t = 0$ , she identifies a small ball  $B$  of test particles centered on her. Suppose this ball expands with the universe, remaining spherical as time passes because the

universe is isotropic. Let  $R(t)$  stand for the radius of this ball as a function of time. The Einstein equation will give us an equation of motion for  $R(t)$ . In other words, it will say how the expansion rate of the universe changes with time.

It is tempting to apply equation (2) to the ball  $B$ , but we must take care. This equation applies to a ball of particles that are initially at rest relative to one another -- that is, one whose radius is not changing at  $t = 0$ . However, the ball  $B$  is expanding at  $t = 0$ . Thus, to apply our formulation of Einstein's equation, we must introduce a second small ball of test particles that are at rest relative to each other at  $t = 0$ .

Let us call this second ball  $B'$ , and call its radius as a function of time  $r(t)$ . Since the particles in this ball begin at rest relative to one another, we have

$$\dot{r}(0) = 0.$$

To keep things simple, let us also assume that at  $t = 0$  both balls have the exact same size:

$$r(0) = R(0).$$

Equation (2) applies to the ball  $B'$ , since the particles in *this* ball are initially at rest relative to each other. Since the volume of this ball is proportional to  $r^3$ , and since  $\dot{r} = 0$  at  $t = 0$ , the left-hand side of equation (2) is simply

$$\left. \frac{\ddot{V}}{V} \right|_{t=0} = \left. \frac{3\ddot{r}}{r} \right|_{t=0}.$$

Since we are **assuming** the universe is isotropic, we know that the various components of pressure are equal:  $P_x = P_y = P_z = P$ . Einstein's equation (2) thus says that

$$\left. \frac{3\ddot{r}}{r} \right|_{t=0} = -\frac{1}{2}(\rho + 3P).$$

We would much prefer to rewrite this expression in terms of  $R$  rather than  $r$ . Fortunately, we can do this. At  $t = 0$ , the two spheres have the same radius:  $r(0) = R(0)$ . Furthermore, the

$$\ddot{r}(0) = \ddot{R}(0)$$

second derivatives are the same:  $\ddot{r}(0) = \ddot{R}(0)$ . This follows from the equivalence principle, which says that, at any given location, particles in free fall do not accelerate with respect to each other. At the moment  $t = 0$ , each test particle on the surface of the ball  $B$  is right next to a corresponding test particle in  $B'$ . Since they are not accelerating with respect to each other, the observer at the origin must see both particles accelerating in the same way, so

$$\ddot{r}(0) = \ddot{R}(0)$$

. It follows that we can replace  $r$  with  $R$  in the above equation, obtaining

$$\left. \frac{3\ddot{R}}{R} \right|_{t=0} = -\frac{1}{2}(\rho + 3P).$$

We derived this equation for a very small ball, but in fact it applies to a ball of any size. This is because, in a homogeneous expanding universe, the balls of all radii must be expanding at

$$\ddot{R}/R$$

the same fractional rate. In other words,  $\ddot{R}/R$  is independent of the radius  $R$ , although it can depend on time. Also, there is nothing special in this equation about the moment  $t = 0$ , so the equation must apply at all times. In summary, therefore, the basic equation describing the big bang cosmology is

$$\frac{3\ddot{R}}{R} = -\frac{1}{2}(\rho + 3P), \tag{3}$$

where the density  $\rho$  and pressure  $P$  can depend on time but not on position. Here we can imagine  $R$  to be the separation between any two 'galaxies'.

To go further, we must make more assumptions about the nature of the matter filling the universe. One simple model is a universe filled with pressureless matter. Until recently, this was thought to be an accurate model of our universe. Setting  $P = 0$ , we obtain

$$\frac{3\ddot{R}}{R} = -\frac{\rho}{2}.$$

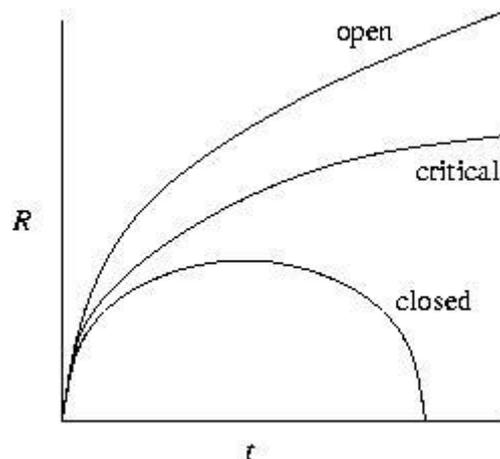
If the energy density of the universe is mainly due to the mass in galaxies, 'conservation of galaxies' implies that  $\rho R^3 = k$  for some constant  $k$ . This gives

$$\frac{3\ddot{R}}{R} = -\frac{k}{2R^3}$$

or

$$\ddot{R} = -\frac{k}{6R^2}.$$

Amusingly, this is the same as the equation of motion for a particle in an attractive  $1/R^2$  force field. In other words, the equation governing this simplified cosmology is the same as the Newtonian equation for what happens when you throw a ball vertically upwards from the earth! This is a nice example of the unity of physics. Since "whatever goes up must come down -- unless it exceeds escape velocity," the solutions of this equation look roughly like this:

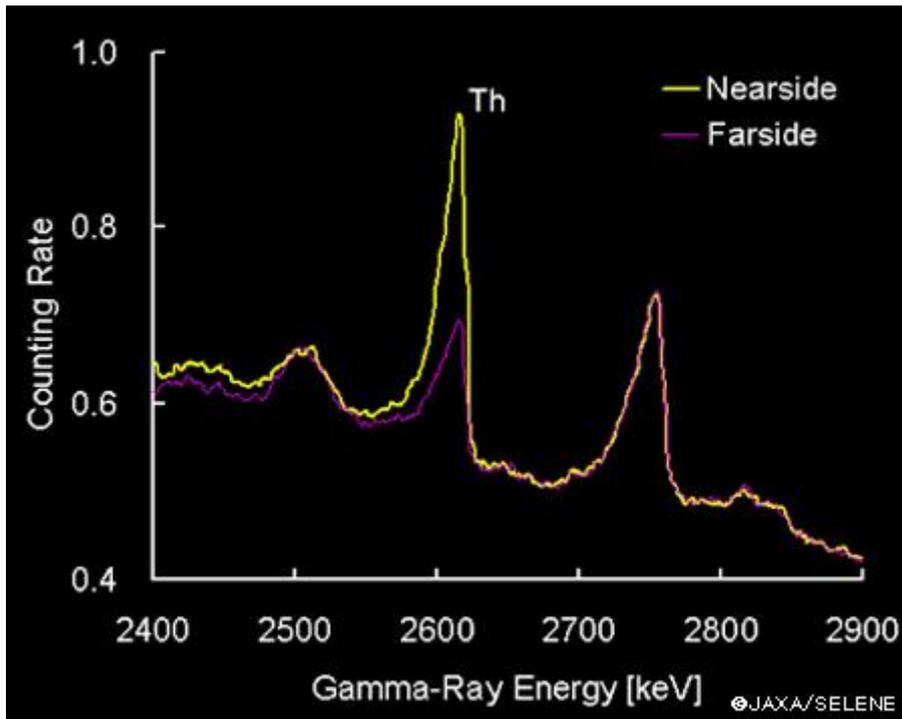


So, the universe started out with a big bang! It will expand forever if its current rate of expansion is sufficiently high compared to its current density, but it will recollapse in a 'big crunch' otherwise.

Source :<http://math.ucr.edu>

### ASSUMPTION

CONCLUSION . My conclusion is that if the assumption is wrong so will be the conclusion. **Note:** Math says stars and galaxies are small.



Attachment 2. Thorium graph of the moon made by JAXA as measured by the KAGUYA spacecraft. ©JAXA/SELENE.