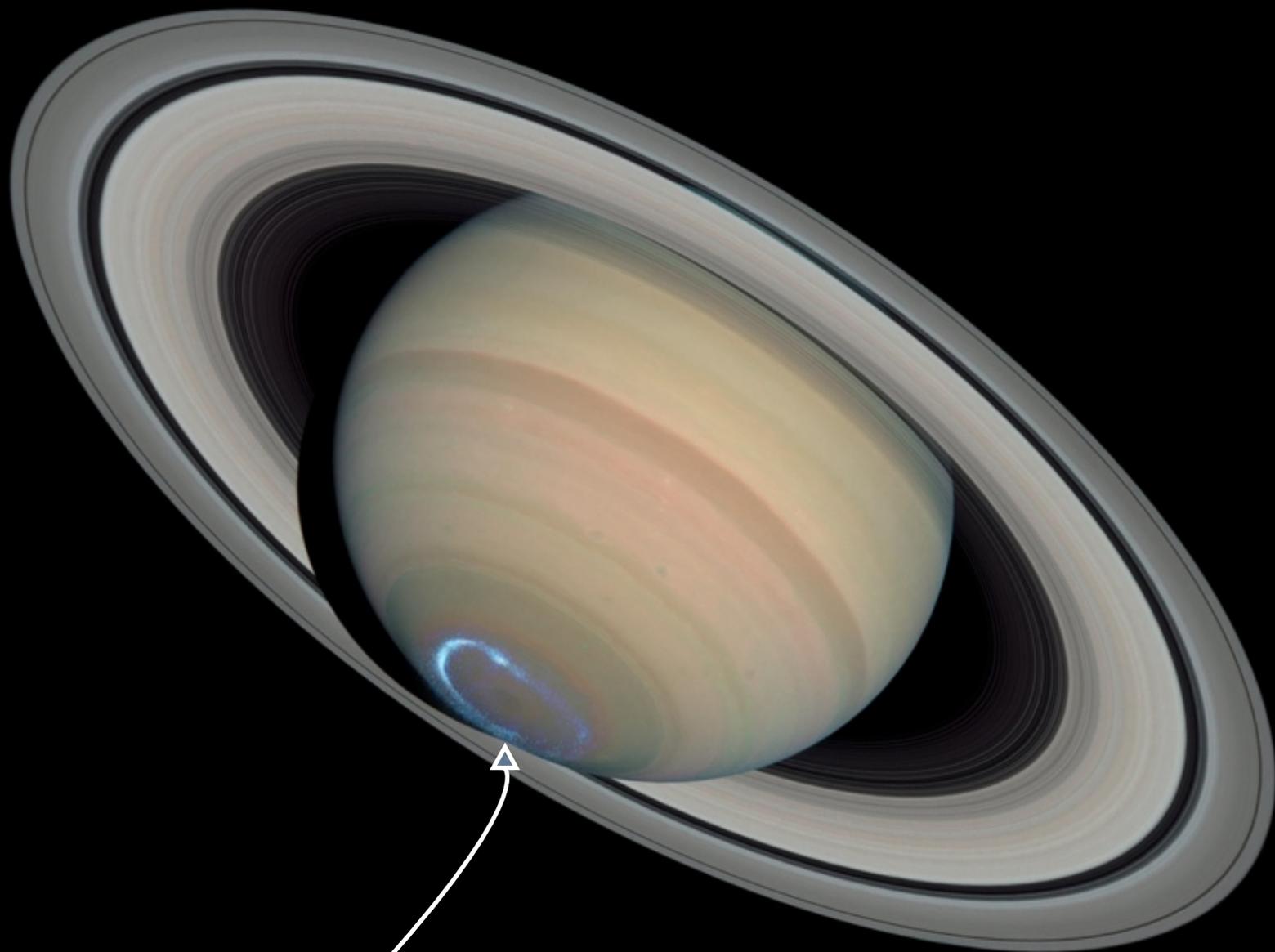


A photograph of the Aurora borealis (Northern Lights) over a snowy landscape. The aurora is a vibrant green and blue, appearing as a large, glowing, and somewhat blurry shape in the dark night sky. The ground is covered in snow, and there are some evergreen trees in the foreground. In the distance, there are some lights, possibly from a town or a building. The sky is dark blue and black, with many stars visible. The overall scene is a beautiful and serene winter night.

Aurora borealis ... as seen on earth ...



... here it is also

... almost 10x the distance from the sun.

Big Bang? or Proton Dominated Infinity?

by
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Basic outline:

- The "Big Bang" defined
- Shortfallings of the "Big Bang"
- How have we fooled ourselves for so long?
- Requirements of a new theory
- Explanation of the theory "Proton Dominated Infinity"
- Predictions of the theory
- Summary

The "Big Bang" defined:

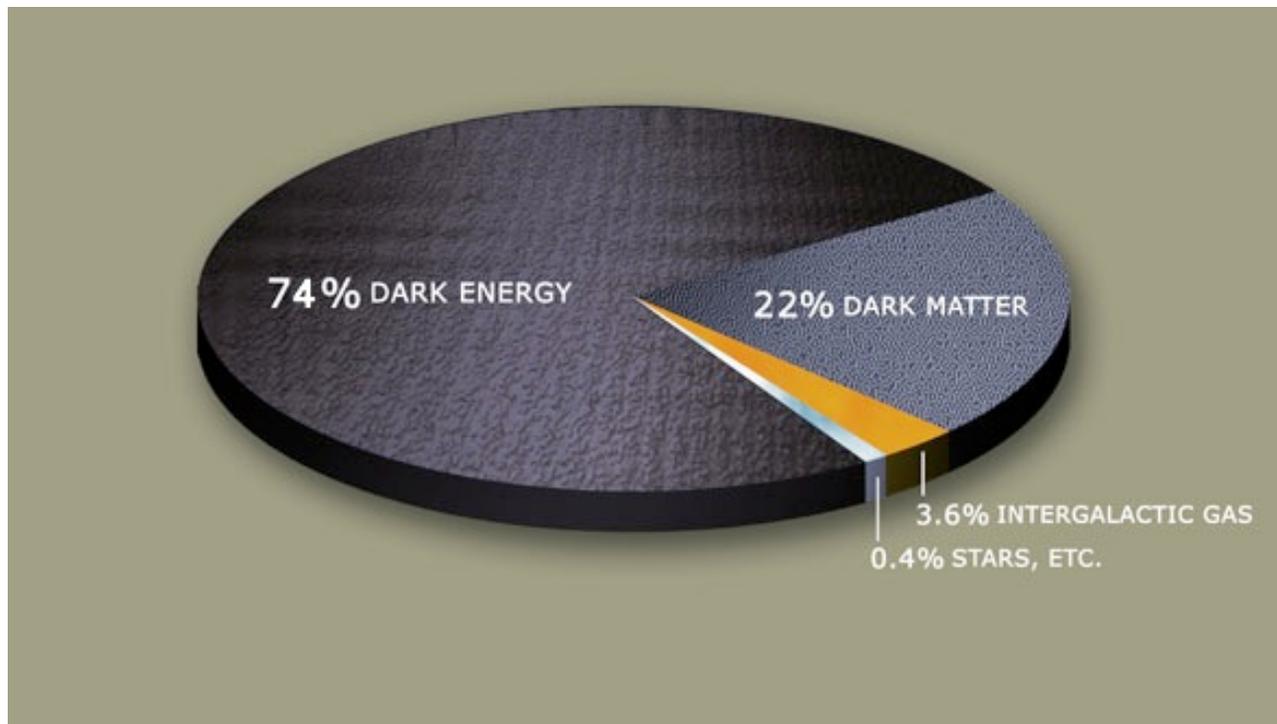
- Massive expansion of the universe beginning 13.7 billion years ago from a "singularity" (not of the material in the universe, but of space itself).
- Evidenced from the red shift of galaxies correlated with the distance from the Earth by Edwin Hubble in 1929 and confirmed by later observations. The red shift infers a "cosmological expansion of the universe" currently estimated to be about 73 m/sec./Mpc.
- Observed Cosmic Microwave Background (CMB) is highly homogeneous and isotropic which is explained well by the "reionization" of the universe when it was about 3000 degrees K approximately 380,000 years after the Big Bang. This background radiation is currently "cosmologically red shifted" to approximately 2.7 degrees K.
- Abundances of molecules are predicted by the Big Bang theory to be initially 75% hydrogen, 25% helium with small quantities of Li and Be. This prediction is supported by observational evidence.

Shortfallings of the "Big Bang"

- Historically the Big Bang theory has suffered from accepted problems called the "flatness problem" and the "horizon problem". Both are resolved if one accepts a theory called "Inflation" ... a sudden increase in expansion rate of the very early universe, followed by a dramatic reduction and slow acceleration (currently measured). In the author's opinion "Inflation" is simply beyond simplistic elegance and reason: a new version of "epicycle bandaging".
- The Big Bang theory requires the existence of a force currently labelled "Dark Energy" ... that has yet to be defined.
- "Dark Matter" ... currently an unknown matter that seems to only react gravitationally. The Big Bang theory predicts that about 26% of the universe's energy/mass is made up of matter ... 22% "Dark Matter" and 4% baryonic (known) matter. The remaining 74% is estimated to be "Dark Energy".
- There is no explanation of what initiated the "Big Bang" or of what happened BEFORE the "Big Bang".

Shortfallings ... continued

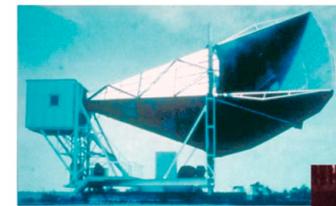
- In essence only 4% of the total energy/mass in the universe is understood if the "Big Bang Theory" is correct.



How have we fooled ourselves for so long?

- Religion has always presented answers to the questions that couldn't be resolved by science. The Catholic church has supported the "Big Bang Theory" (ref. address of Pope Pius XII to the Pontifical Academy of Sciences, November 22, 1951) an occurrence so amazing that only a "higher power" could be its cause?
- The "Big Bang Theory" does explain documented observations better than earlier competing theories like the "Steady State Universe" theory.
- The "Big Bang Theory" predicted the presence of an almost perfectly homogeneous and isotropic background radiation ... which was serendipitously found by Penzias and Wilson in 1964 (who received the Nobel Prize for this discovery in 1978). Cosmologists et.al. overwhelmingly viewed this "prediction come true" as virtual proof of the Big Bang Theory. Any new theory will therefore have an steep uphill road to success.

DISCOVERY OF COSMIC BACKGROUND

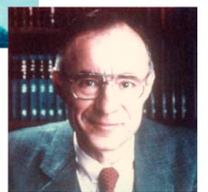


Microwave Receiver



MAP980045

Robert Wilson



Arno Penzias

Any new theory must be able to explain current observations:

- "Hubble" relationship between radial velocities of galaxies and their distances (relative to the Milky Way)
- Cosmic Microwave Background (CMB) radiation
- Current observable abundances of atoms in the universe as a whole
- Star velocity distribution in galaxies as well as "relativistic bending of light" indicating the need for the existence of "dark matter"

... and hopefully do so in a more elegant way.

Basic premises of a new theory titled:

”Proton Dominated Infinity”

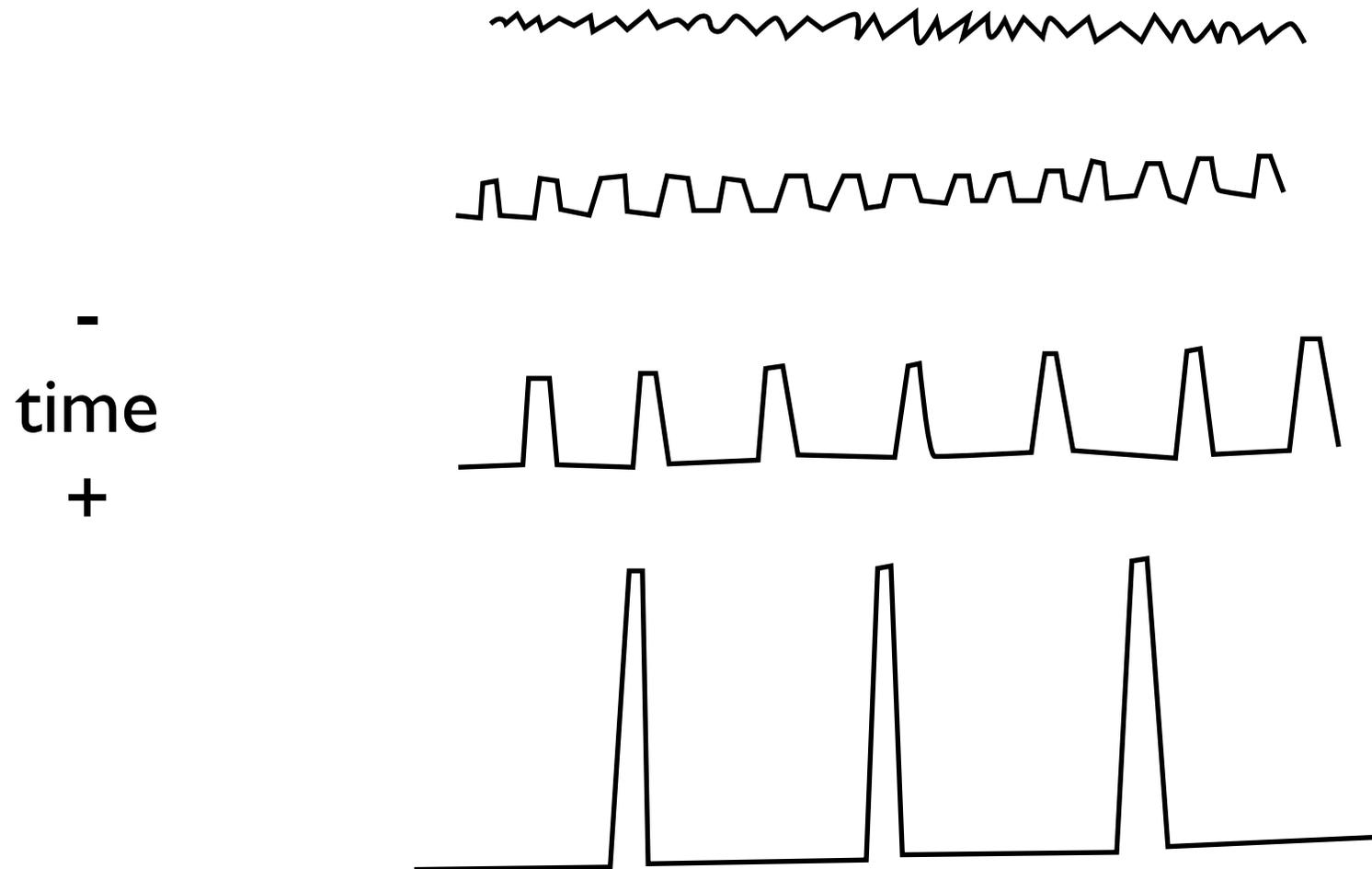
- A large overabundance of protons (vs. electrons) were free-floating in the universe in the earlier state of the universe.
- Light red-shifts naturally over extremely large distances ... ”tired light theory”.
- Time is infinite, in both forward and reverse modes.
- Space is infinite, ”flat” and space (not space-time) is static (neither expanding nor contracting).

Predictions of the theory "Proton Dominated Infinity"

- The universe "becomes" more homogeneously filled with neutrally charged matter as time is considered ... in reverse.
- In forward mode, the available electrons quickly connect with protons to form neutrally charged hydrogen atoms.
- The neutrally charged hydrogen atoms then clump together due to gravity. Stars form. Galaxies form. Groups of galaxies form.

Predictions of the theory ... continued

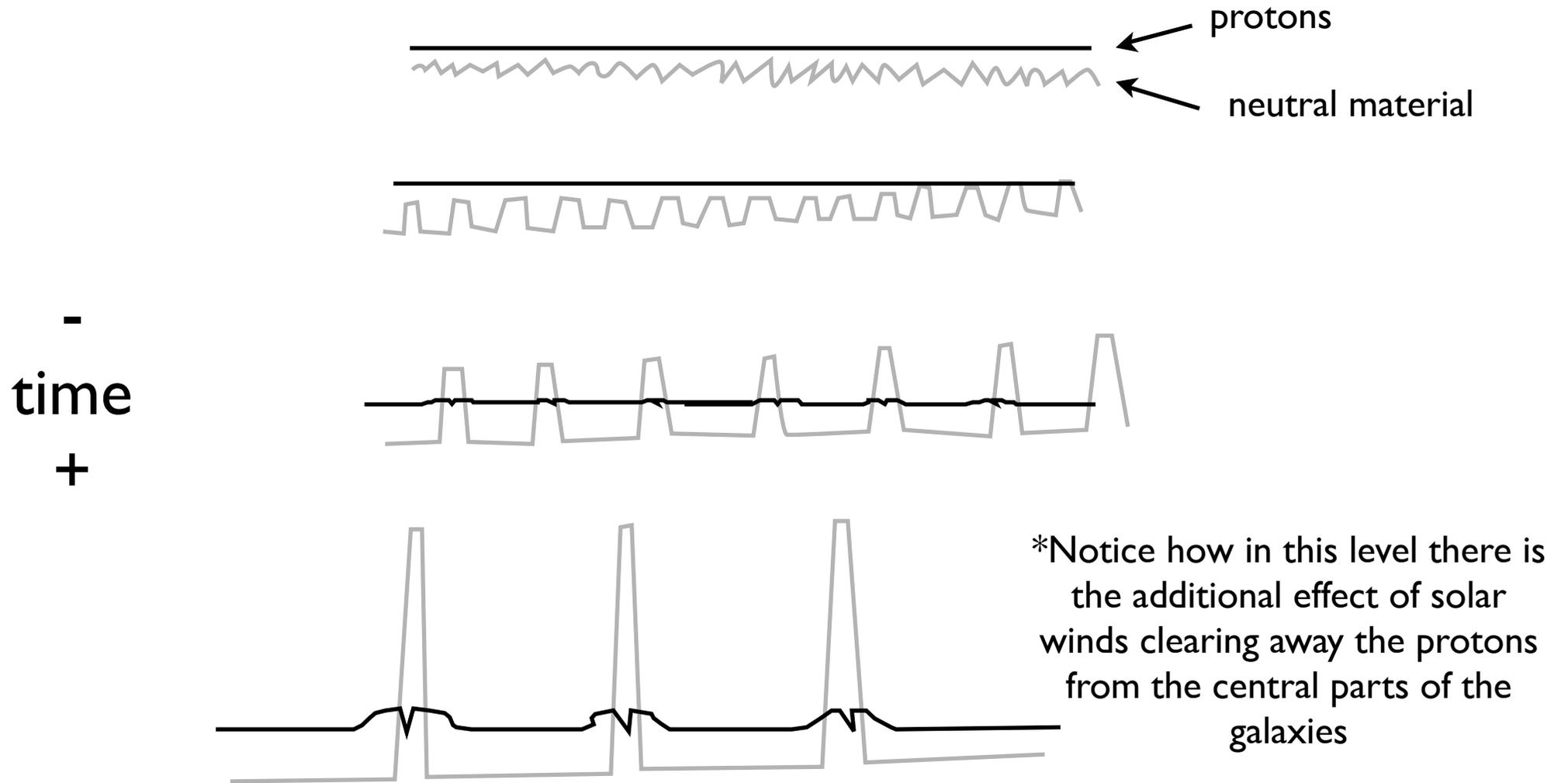
The following is a simplified way to picture the changes of the distribution of neutrally charged mass over immense periods of time.



- Now add the protons to the picture:
- The electrical repulsiveness and abundance of the protons causes a rapid and persistent homogeneity of the protons throughout the universe as time progresses in the "forward" mode.
- However, once the neutrally charged matter accumulates into significant "clumps", then the weak effect of gravity (vs. electromagnetic force) becomes strong enough to distort the proton formation into higher densities around these "clumps of neutrally charged matter".

Predictions of the theory ... continued

Then we can simplistically visualize how the positively charged protons would position themselves in relation to the neutrally charged mass.

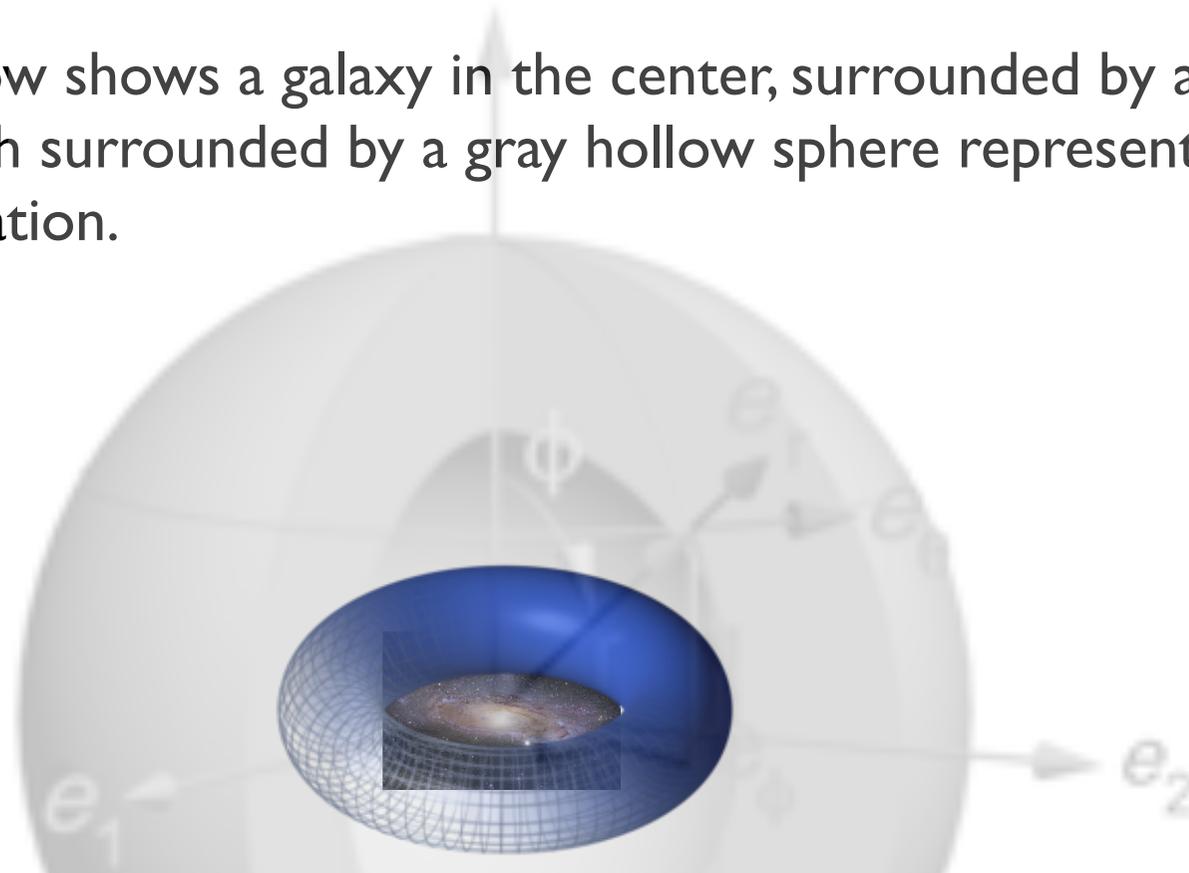


- Hot plasma (electrons and protons) ejected as stellar winds stream away from the stars of a galaxy as "stellar winds". Their high temperature (measure of vibration energy et.al.) prevent their recombination.
- The cold protons from the intergalactic medium (IGM) are then able to capture the hotter electrons from the stellar winds forming more hydrogen and allowing the hotter protons to continue outwards ... thereby repelling the remaining cold protons away from the central galaxy area.

Predictions of the theory ... continued

- Over time, galaxies will have a massive black hole in their centers, surrounded by revolving stars, which are in turn surrounded by hydrogen, which is in turn surrounded by a large spherical formation of protons. Stellar winds should then clear away most of the protons from the central galactic regions.
- This prediction should be evident in the current universe.

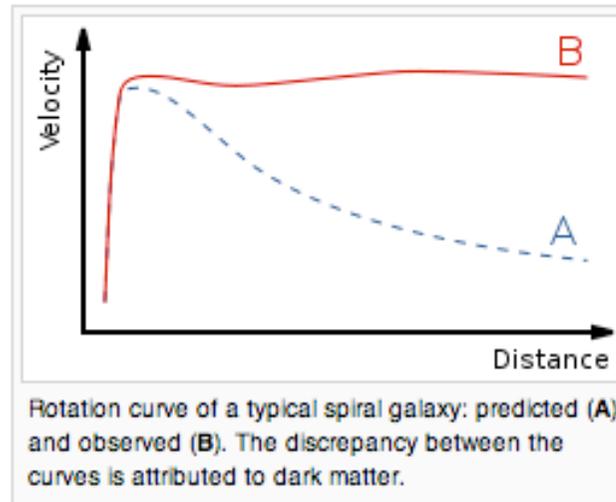
- Picture in your mind a galaxy, surrounded by a torus of hydrogen molecules, surrounded in turn by a hollow sphere of protons which taper into homogeneity in the intergalactic medium (IGM).
- The picture below shows a galaxy in the center, surrounded by a blue torus (hydrogen) which is surrounded by a gray hollow sphere representing the proton accumulation.



- ④ Recent work by Matt Walker and Jorge Penarrubia implies that Dark Matter is formed as a "pitless peach" around two studied dwarf galaxies.

http://www.spacedaily.com/reports/Dark_Matter_Mystery_Deepens_999.html

- Protons have mass and should accumulate around galaxies due to gravitation. This additional proton mass in spherical formation around galaxies easily explains the currently measured flat velocity curves of the stars in their galaxies.

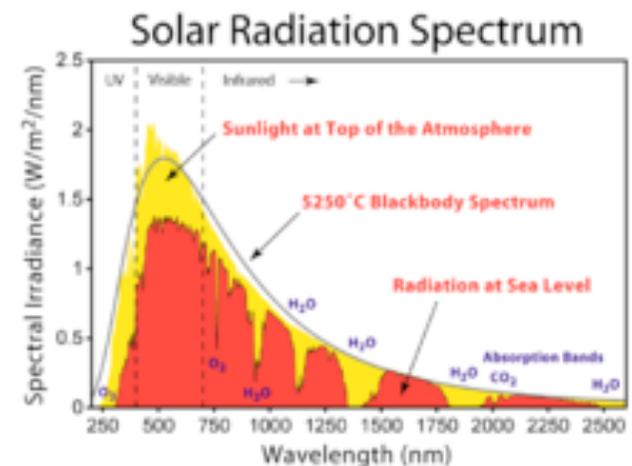


- According to Wikipedia: "Dark matter was postulated by Fritz Zwicky in 1934 to account for evidence of "missing mass" in the orbital velocities of galaxies in clusters. Subsequently, other observations have indicated the presence of dark matter in the universe; these observations include the rotational speeds of galaxies, gravitational lensing of background objects by galaxy clusters such as the Bullet Cluster, and the temperature distribution of hot gas in galaxies and clusters of galaxies."

- ... hence "Dark Matter" is therefore predicted by this theory to be an "overabundance of protons".

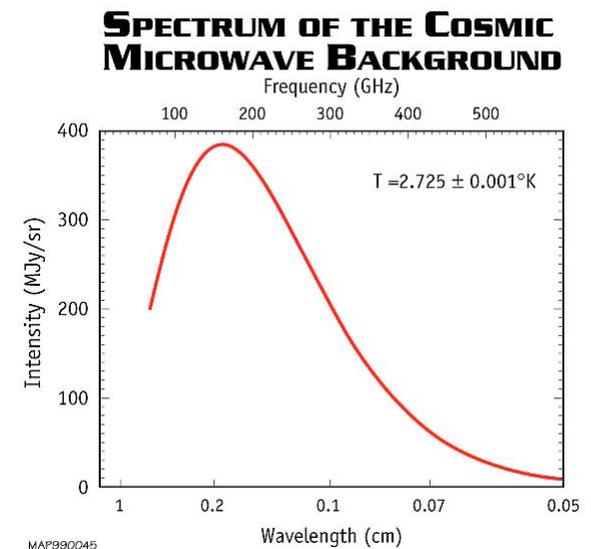
Predictions of the theory ... continued

- Stars emit a blackbody electromagnetic spectrum based on their temperature. The peak of the curve corresponds to the emitting body's temperature according to Planck's law. The sun's photosphere can therefore be measured to be about 5600 degrees K.
- Due to the presence of electrons that absorb or emit specific wavelength photons when changing energy levels, stars also have a rich overlay of absorption and emission lines in their radiation.

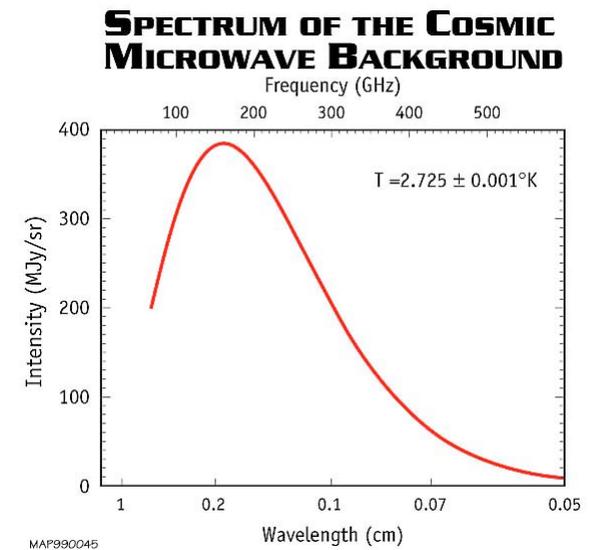


- Abundant quantities of protons must also emit a blackbody emission based on their temperature.
- The expected temperature should be higher than zero degrees K due to their own absorption characteristics.
- However, given their extreme age they should be colder than all other known molecules in space. So, it is reasonable to guess/assume a temperature of approximately 2.73 degrees K.
- In addition, since there are no electrons involved there should be no absorption or emission lines present in their radiation.

- This is, of course, a preordained prediction. However, the facts are evident. There is indeed a virtually perfect black body radiation emanating from all directions with a measured temperature at 2.73 degrees K.
- This emission is currently considered to be the "Cosmic Microwave Background" or CMB. It was originally serendipitously discovered by Penzias and Wilson in 1964, and later identified as the radiation from the reionization period about 380,000 years after the "Big Bang". A Nobel Prize was awarded Penzias and Wilson in 1978 for their find.
- However, Proton Dominated Infinity was not an option at the time and therefore was not considered.



- ... hence, the theory of Proton Dominated Infinity therefore predicts that the overabundance of protons in the universe is the true source of what we now call the Cosmic Microwave Background (CMB).



- It is proposed that light red-shifts naturally over extremely large distances ... and thereby the "tired light theory" (first suggested by Fritz Zwicky in 1929) explains the observed relationship between the red-shift of light (not velocity) and distance, measured in mega parsecs (Mpc).

- Ever since Edwin Hubble identified the relationship between the red shift of light from a galaxy and its calculated distance astronomers have implied that the red shift is caused by a an assumed velocity between our galaxies.

Velocity-Distance Relation among Extra-Galactic Nebulae.

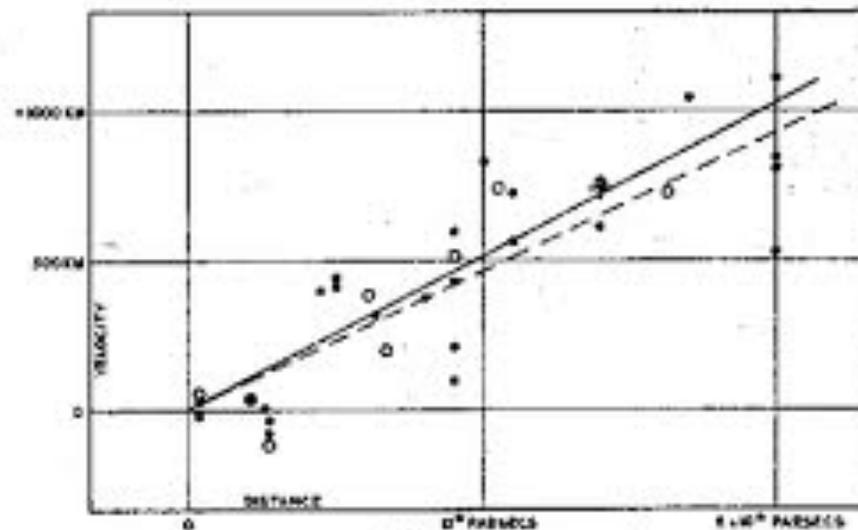


FIGURE 1

- The assumption of a doppler shift due to the expansion of the universe was made to explain the observed red shifting of light from distant galaxies.
- Hubble's Law was therefore written as $V=H_0 \cdot D$ where H_0 is called the Hubble constant, V is velocity and D is distance.
- However, no measurements of the velocity have ever been confirmed in some other way.
- More and more astronomers now refer to the Hubble relationship in its true essence:

Predictions of the theory ... continued

$$C * Z = H_o * D$$

... where C is the speed of light in a vacuum, z is a measure of red shift, D is distance and H_o is the Hubble constant.

- Notice that there is now no reference to a "velocity".
- Now consider the possibility that the red shift of light is caused by some other physical process.
- Proton Dominated Infinity uses as a premise that light red shifts naturally over astronomical distances in accordance to the theory of "Tired Light" which was first proposed by Fritz Zwicky in 1929.

- One might ask, "what could be the logic or reasoning behind this tiring?"
- A competing theory to Proton Dominated Infinity, the "plasma theory of the universe" points out the "importance of temporal and spatial fluctuations of the random plasma field for the emission and propagation of electromagnetic waves" **and states that**, "it is the plasma 'micro'field which is also responsible for the redshift of galaxies".
- Check it out at:
<http://www.plasmaphysics.org.uk/research/redshift.htm>

- Perhaps this theory of plasma micro field fluctuations also applies to a plasma field including only protons ... ???
- In any case, any non-doppler shift explanation for the red shifting would obviate the need for a currently unknown energy like "Dark Energy" to explain an expansion of the universe.

- ... hence, Proton Dominated Infinity claims that there is no "Dark Energy" in the universe.

- A curious implication becomes evident: the resulting calculation used in many textbooks and astronomy classrooms for the age of the universe ($= 1/H_0 = 13.7$ billion years) becomes irrelevant ... in line with the Proton Dominated Infinity's other premise that time is infinite in both the forward and reverse modes.

- Since helium (He) is formed by fusion in virtually all stars ... as well as other elements of higher atomic weight ... and since time is extensively longer than the current estimation by the Big Bang Theory (13.7 billion years) ... then it is reasonable to expect that stellar element abundances could be at least 25% He and maximumly 75% H, as currently observed.

and in summary ...

- **Dark Matter is really an "overabundance of protons" that accumulate spherically around galaxies which currently emits a black body radiation at 2.73K.**
- **There is no Dark Energy.**
- **The relationship between red shift of the light from and distance is caused by "Tired Light" and not by the expansion of the universe.**
- **There has been time enough to form the observable elements in the universe.**

Naturally some questions remain ...

- **Would Thompson/Compton Scattering by protons put a limit on the distance that light could travel to us before it is completely scattered?** - according to theory Thompson Scattering is proportional to $1/\text{mass}^2$. This would indicate that protons would scatter light almost 4 million times less effectively than electrons. Assuming that the absorption coefficient of the protons dominates over the scattering coefficient then perhaps the real effect would be an overall darkening of the universe (additional explanation of Olber's paradox) and not a hazing.
- **If time is infinite in both forward and reverse modes then why hasn't the process of neutral mass clumping and proton accumulation around galaxies already happened long long ago?** -this philosophical question is well taken. However, our own existence is dependent on the existence of the current state of the universe in the infinite progression from homogeneity to super massive black holes separated by immense astronomical distances.

Occam's Razor

- “When multiple competing hypotheses are equal in other respects, the principle recommends selecting the hypothesis that introduces the fewest assumptions and postulates the fewest entities” - the sense that Occam's razor is usually understood according to Wikipedia.com

In essence, elegance matters in the world of competing theories.

- What do you think? Write your questions or comments in the logbook.

Thanks.

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