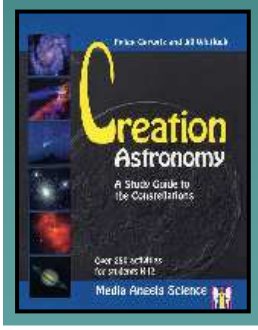
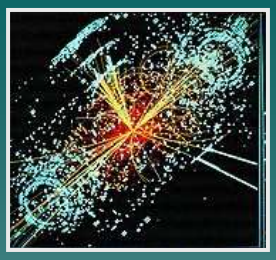
The Heavens Declare the Glory of God



The Big Bang and the Speed of Light
By Felice Gerwitz

http://www.MediaAngels.com

Origins and Theories



- Who are we?
- Why are we here?
- How did the universe come into existence?
- Was it designed by God?

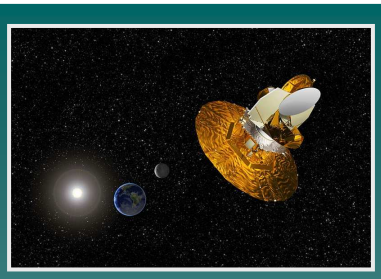
– Man has many theories …God is truth!

Why Does it Matter?

- Psalm 8:3: "I consider thy heavens, the work of thy fingers, the moon and the stars, which thou hast ordained."
- Jesus himself referred to the book of Genesis many times!

Genesis 2:2
God ended His work of creation.

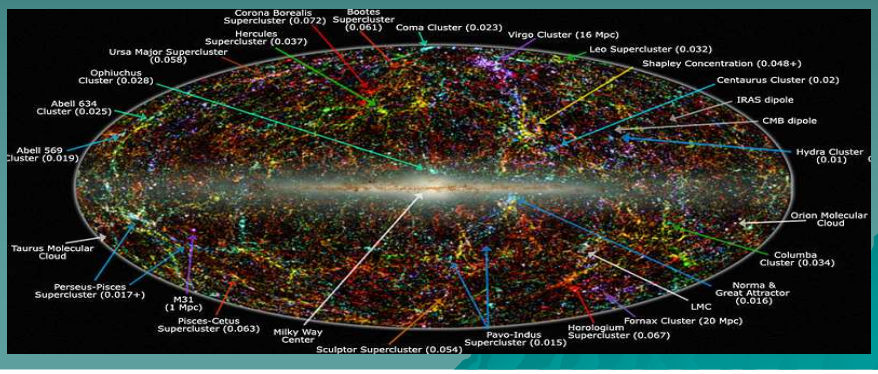
Many Beliefs…



- Young Earth Creationist (6-15,000 years)
- Old Earth Creationist (Billions of years)
- Intelligent Design (Intelligence created)
- Raelianism (Life by aliens)
- Forbidden Archaeology (Reincarnation)
- Big Bang (14 Billion Years…An explosion of gases)

Which is easier to Believe?

- Nothing created something
  - the universe and all that is in it
- In the beginning God created…



Problem

Creationist Position

- "Evolution is just a theory"
  - Evolution is not "proven"
  - "Evolution of LIFE from NON-LIVING matter and from one basic type of organism to a different type has not the slightest experiment/observation al support" (AIG)

Evolutionist Position

- "Evolution IS a theory."
  - Evolution is a well-substantiated explanation of data
  - Evolution does not need to be "proven" only "disproven"

Evolutionary Origin Theories Are…

- Untested
- Assumptions
- Theories
- Speculations
- Based on Naturalism (Nature is all there is)
- Unsubstantiated
- Full of Problems

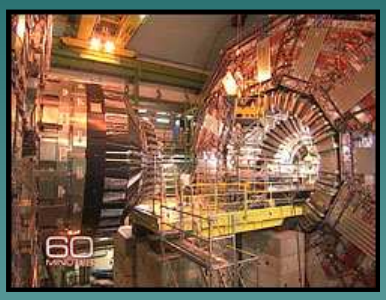
- One of many theories (misconception)
  - What happened AFTER creation not how creation happened
  - Tiny ball of hot matter exploded
  - Expanded into 3-D space
  - Billions of years matter would cluster into galaxies, groups of stars, and other "island" galaxies in a "sea" of empty space
- Better Big Bang Explanation
  - Space itself would expand outward with the ball of hot matter
  - Matter would fill space at all times
  - There would never be a large empty part of space
  - Matter: have no boundary and no unique center

- "When you read or hear anything about the birth of the universe, someone is making it up."
  Leon Ledermann author
  The God Particle

What is the Big Bang?

Collider Experiment

- Particle collider
- Recreate the Big Bang
  - By crashing protons together at high speed
- Higgs boson theory
  - Key building block particle to explain why particles have mass



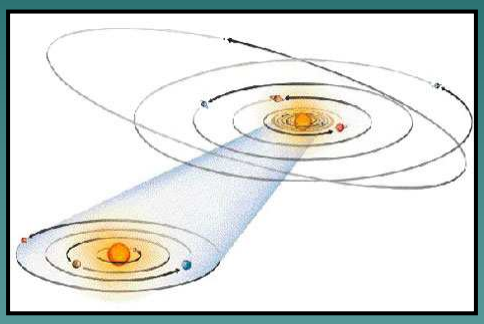
Swiss-French border near Geneva Hadron Collider

Problems with the Big Bang

- A bang would cause matter to expand outward and not contract
- The stars older than the universe and no Population III stars
- Young galaxies too old
- Element Abundance found in space
- The CMB (Cosmic Microwave Background) is uniform everywhere
- There are super-clusters of stars
- Planets rotating other stars like Jupiter
- There are vast voids in space
- Motions of the galaxy
- Invisible dark matter
  - "When we look for predictions of the Big Bang theroy which have been correct, or observations which have been logically explained, it is high to find them. All we find is a compilation of wild and unsupported possibilities." Arnold G. Gulko

How did Our Universe Form?

- Scientists believe after the Big Bang
  - The clumps of matter started to swirl
  - The swirling mass began to move in a straight line away from the explosion
  - This disk became our Solar System



Law of Conservation of Angular Motion

Solar System Defies Evolution

- Sun spins clockwise
- Planets move counter clockwise
- Venus and Neptune rotate backwards

Static Universe Model

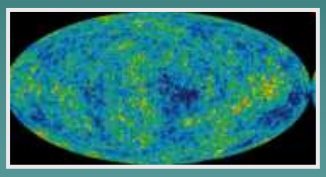
- We observe order and not chaos
  - Steady state or planets and solar system
  - Outward expansion
    - Huge explosion after the bang then it slows?
  - Observation of Universe
    - No need to adjust parameters with a Creationist perspective
    - Need to adjust the parameters to explain the Big Bang

Stars are Older than the Universe?

- Age of globular clusters appear older than the universe
  - You can't be older than your mom!
- Missing Population III Stars
  - Population I
  - Population II
  - Population III?

Cosmic Microwave Background Radiation (CMB)

- Uniform heat is a puzzle
  - Evolution true? Heat should be different temps at different locations.
- Mass density observed
  - Different from big bang theory
- CMB Smooth
  - Doesn't fit big bang model
- Stars formed earlier
  - By their own dating methods than predicted



- Scientists base conclusions on philosophical assumptions.

Super Clusters of Stars

- Vast Voids in Space
- Motions of the Galaxy
  - We should see an even distribution of stars not clumps and clusters
  - We should not see voids in space
  - Spiral galaxies still spin for billions of years?
    - They would be twisted up

Distant Starlight Problem

- Galaxies so far away it would take billions of years to reach earth
- This proves the big bang is correct. Right?
  - Problems:
    - Assumption of naturalism and uniformitarianism
    - Problems with big bang and light (redshift)

What if we live in an Island Universe?

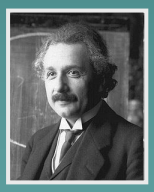
- *Starlight and Time* shows Biblical and observational evidence supports:
  - the cosmos has a unique center and a boundary for its matter, beyond which there is at least some empty space
  - on a cosmic scale of distances, the earth is near the center
    - The universe IS an Island Universe!

Bounded or Non Bounded?

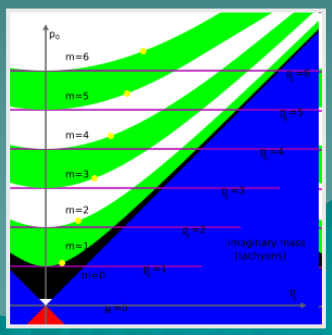
- Bounded universe
  - Travel outward from the center
  - "Upward" gravitational sense
  - Heavens are at a higher gravitational altitude than on earth
- Unbounded universe
  - First half of journey upward, second half down and it would average to zero
  - No part is higher or lower
    - Isaiah 55:9: "For as the heavens are higher than the earth…"

Theory of Relativity

- General Relativity
  - Effects of high speeds
- Special Theory of Relativity
  - Effects of gravity and acceleration
  - Time, space and matter



Albert Einstein



Center of Gravity

- General Relativity
  - Gravitational Time Dilation!
  - Time and all physical processes run more slowly in areas which are lower in gravity than those that are higher
  - What does this mean?

Praise him, sun and moon, praise him, all you shining stars. Praise him, you highest heavens and you waters above the skies. Let them praise the name of the LORD, for he commanded and they were created. He set them in place for ever and ever; he gave a decree that will never pass away. Psalm: 148: 3-6

Creation Week: Earth Standard Time!

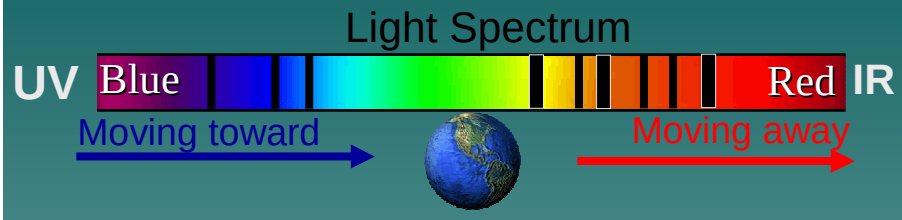
- Fourth day of the Creation Week
  - Expanding Universe at Critical Size: 50 x smaller than today…gravitational time dilation would have been important.
  - One ordinary day on earth =
    - Billions of years worth of physical processes taking place in distant parts of the universe
    - Starlight from even the most distant star could arrive during or soon after the fourth day
    - During that day most of the expansion of the cosmos would have taken place

      – D. Russell Humphreys, Ph.D. Physics

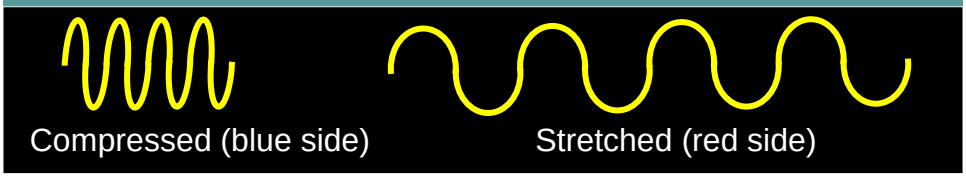
Fast Light?

- Marching Band

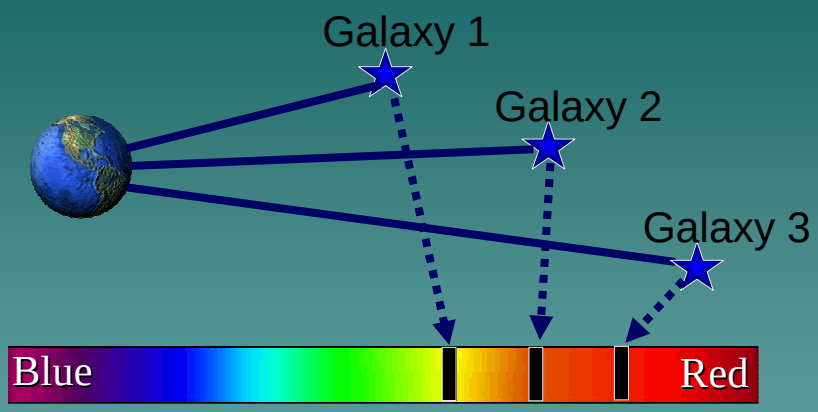
Redshift of Starlight



- Used to describe the expansion of the universe
- The distance of a galaxy from the earth

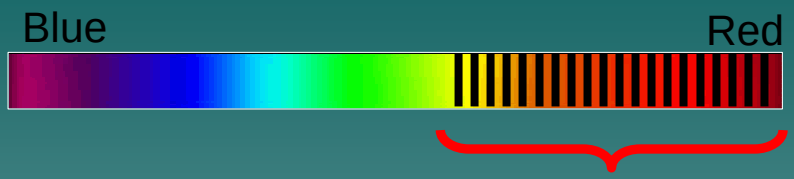


Redshift Interpretation



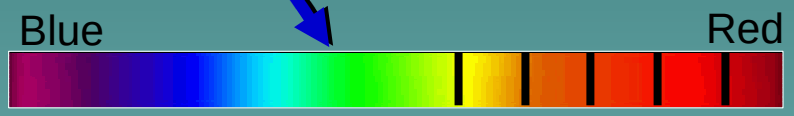
We should observe redshifts at all distances along the light spectrum (big bang model)

Redshift Values



Big bang model predicts a homogeneous universe

What we observe



Distinct quanta (1-million light year intervals)

A God of Miracles

- God created trees mature with fruit
- God created mature animals
- God created Adam mature
- Jesus fed the 5,000
- Jesus turned water into wine
- Jesus withered the fig tree (Matt 21:18-19)
- Instant learning of language (Tower of Babel)
- Instant healing of soldier's ear (Luke 22:51)
- Creation was "very good" (Gen 1:31)
  - He could have created light infinitely fast!

God Created

- God created the universe of time, space, and matter, instantaneously, by His own omnipotent and spoken will. *"By the word of the Lord were the heavens made; and all the host of them by the breath of His mouth. . . . For He spake, and it was done; He commanded, and it stood fast"* (Psalm 33:6,9).
  - No place for evolution

Fun Facts

- How much is one billion? If you counted one number every second without stopping it would take you 32 years!
- Electricity travels at the speed of light 186,000 miles per second
- Radiowaves are electromagnetic and travel at the speed of light
- Charles Darwin did not "invent" evolution, but he did convince most biologists that it had occurred
- The Big Bang is only one of many theories
- To get government funding for scientific research you must agree with the Big Bang
- Fun number comparisons of light speed: http://www.skippypodar.net/Podar/30miles.html

Kids Yahoo Group

- Post Questions to the Group
- Visit to chat
- Meet like-minded friends

- Email me for an invitation
  - It is a closed group
    - felice@mediaangels.com

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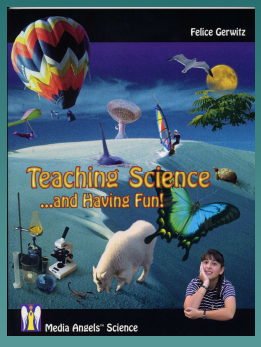

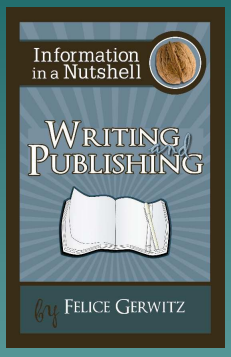

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MEDIA ANGELS® INC.

ONLINE NEWSLETTER

Volume II, Issue 1 — January-February 2007

"Start Fresh"

By Felice Gerwitz

Happy New Year! I pray the Lord blesses you and your families with the graces needed to continue His plan for your lives. My guest this year is to pray and attempt (of course with His grace) to seen His will for my life... I pray this for your families as well.

Let us rejoice and be glad in it and give honor to Him: for the marriage of the Lamb is come, and his wife hath made herself ready. Revelation 19:7

The holidays are over—the meals have been prepared and eaten—decorations are away and now its time to buckle down and continue the school year! I have—what's a homeschool mom to do? It's hard to switch gears and harder for children to just fall naturally into a routine they have not experienced in a while. Well, I always begin on my knees. While academics (and of course **Creation science**) are very important, fulfilling our roles as caregivers and educators can be daunting—especially after the holidays. Recently I was asked to give a talk entitled "Keeping the Home Fires Burning, Juggling Home Life and School." This was unusual as I'm normally asked to speak on science topics. My daughter, who creates this newsletter, did not know about this and yet she assigned me the topic "Start Fresh"... yes, this is a God-Incidence. So, here we go, 10 ways to encourage and inspire you (and me!) to keep on the path:

1. Remember you are not in control, God is! So, you are in good hands. Prayer should be the central part of your school year.

2. Be organized. This means you take time off to get organized. I've tried getting organized while still schooling and this can be done but it's very difficult. Consider taking a week to allow the children to focus on art, journals (illustrated or not), creative writing or music. While they are about their tasks (if they are able) you can work on what you wish to accomplish for the year. If you have younger children, consider setting up centers* (see below).

3. Be prepared. Doing a lesson and not having the necessary supplies just doesn't work. Recently, I found our poster paints had dried up and I had to substitute water colors in their place. Having a back up plan works. I also make file folders for each child and keep reproducible papers in each. I pull these out when I'm in need. A list of "drills" that the children must do each day are bird charts, states and capitals, countries, continents, US Presidents, multiplication or addition facts, etc. Change these to fit your needs. Every week we have a "drill day contest". (see below).

4. Have goals for each child academically as well as spiritually. I jot down the goals on an index cards. The older the child the more involved they can become in setting goals. List ways you want your children to grow spiritually. For example more time reading the Bible, Scripture memorization or character quality improvements, such as patience or willingness to serve others.

5. Discipline. Maybe this should be number one. Without discipline your

* **Centers**: a designated area with activities children can visit to complete a task... such as a puzzle, art corner, water table with cups, clay, etc. Change it each day to make it fun, preferably when they go to bed so they can wake up to a surprise each day.

* **Drill Day:** Children see if they can beat their last best score. I made up check off sheets for each chart or activity I wanted to check. Do this every week.

Blog Posts

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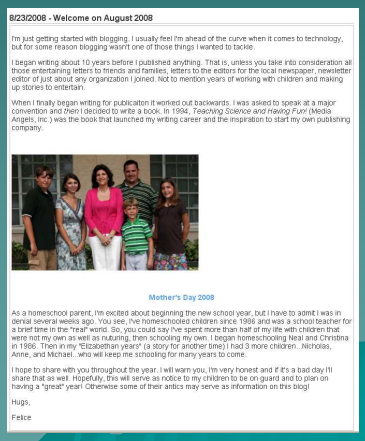

8/23/2008 - Welcome on August 2008

I'm just getting started with blogging. I usually feel I'm ahead of the curve when it comes to technology, but for some reason blogging wasn't one of those things I wanted to tackle.

I began writing about 10 years before I published anything. That is, unless you take into consideration all those entertaining letters to friends and families, letters to the editors for the local newspaper, newsletter editor of just about any organization I joined. Not to mention years of working with children and making up stories to entertain.

When I finally began writing for publication it worked out backwards. I was asked to speak at a major convention and *then* I decided to write a book. In 1994, *Teaching Science and Having Fun!* (Media Angels, Inc.) was the book that launched my writing career and the inspiration to start my own publishing company.

Mother's Day 2008

As a homeschool parent, I'm excited about beginning the new school year, but I have to admit I was in denial several weeks ago. You see, I've homeschooled children since 1986 and was a school teacher for a brief time in the "real" world. So, you could say I've spent more than half of my life with children that were not my own as well as nuturing, then schooling my own. I began homeschooling Neal and Christina in 1986. Then in my "Elizabethan years" (a story for another time) I had 3 more children...Nicholas, Anne, and Michael...who will keep me schooling for many years to come.

I hope to share with you throughout the year. I will warn you, I'm very honest and if it's a bad day I'll share that as well. Hopefully, this will serve as notice to my children to be on guard and to plan on having a "great" year! Otherwise some of their antics may serve as information on this blog!

Hugs,

Felice

ScholarSquare.com

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Or…teach your own class and post it!