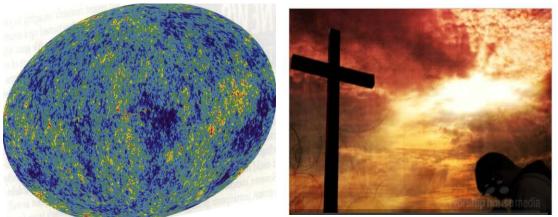
## **Rational Christianity**



Did the laws of nature put that cross on the hospital entrance wall or did God?

Chris Peek will answer that question at the Conservatory theater at 2:00 Tuesday September 9<sup>th</sup>.

## A Rational Christianity



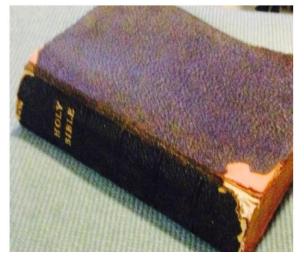
Post Modern Science supports Rational Christianity

- Classical science, such as evolution conflicted with Christianity while post modern science of the 21<sup>st</sup> century supports it.
- At the left is a photo modern science produced showing the universe (Genesis heavens) 380,000 years after creation.
- It supports Genesis 1, "In the beginning God created the heavens and the earth." This encourages a rational belief in Christian scriptures.

### God's Laws of Nature are Miraculous

- One definition for a miracle is: "An act of God: an event that appears to be contrary to the laws of nature and is regarded as an act of God."
- 18<sup>th</sup> century intellectuals were called philosophes and believed classical science such as Newton's laws of motion were God's laws used to create and control the world and life within it.
- Philosophes understood these laws and they were thought to be the final laws of nature so they were not miracles. Jesus walking on water was one of God's miracles.
- Post modern science claims the deterministic three dimensional classical science fails to describe the affect of human consciousness on the world and maybe useful but is incomplete.
- But, the new science is incomplete and seems to contradict common sense. Although it helps us to improve our understanding of the world, the true laws of nature are still a mystery and can be called one of God's miracles.
- Richard Feynman says he doesn't understand his own theories of quantum mechanics and modern physicist say they don't understand complexity or string theory either so we can conclude that God used miracles to create the world.

### An Engineer's Rational Christianity



### Sir Isaac Newton (Principia 1687)



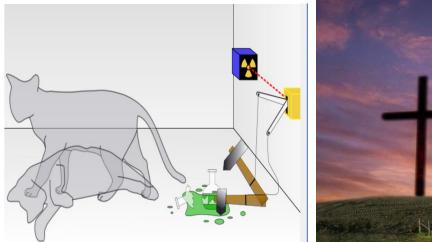
Newton's Equations of Motion

 $\mathbf{v} = \mathbf{u} + \mathbf{t}^2$ 

$$\mathbf{s} = \mathbf{u}\mathbf{t} + (1/2)\mathbf{a}\mathbf{t}^2$$

17<sup>th</sup> century philosophes believed Newton's equations of motion were all that was needed to explain how the Universe and Life could have been created and controlled.

From Christianity at 6 to The scientific at 10



Post Modern Science at 86 to Rational Christianity at 94

- At 6 I was a Christian. At 10 I began my 76 year belief that only materialistic science can explain the world.
- I Moved to Texas and studied subjects not taught at MIT, such as philosophy, history, religion and the new sciences.
- Study of post modern science and philosophy began to support a rational belief in Christianity.

### My Conversion to Science

At 6 years old I slept with the my bible. At 10 there was no need for God, Newton's laws of motion did it all. I discussed my beliefs with my sister Sukey, sometimes most of the night. Her attention and encouragement was a major factor toward my engineering and scientific career for the next 76 years.

That career was based on the assumption that the laws of nature were deterministic so that science and mathematics could provide practical answers to all material as well as societal matters. This scientific method worked for my commercial and financial career but failed when applied to life's ethical and moral questions.

After my wife's wish for Jesus to take her to heaven was granted in 2005 I moved to Texas where my daughter lived, but she shortly moved to Brazil for the sake of her husband's career. I then fulfilled my desire to learn about all those things not taught at MIT, such as history, religion, anthropology, philosophy, post modern science, neurology and societal history.

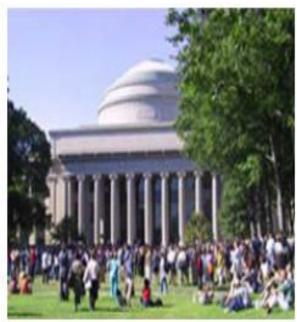
In preparation for this talk I made many attempts to show how a person with a technological culture could learn to accept Christianity without discussing the details of my personal attempt to do so. I failed miserably so please put up with disclosures of my personal life's experiences, some good and some not so good.

## An Engineer's Culture

W8OZG Nancy Chris 1936



Amateur Radio at 16



MIT at 18

- \* How did my signal get from my antenna to his?
- He said It was by waves in the ether. I later learned it was by electro magnetic waves expressed by Maxwell's differential equations.
- I needed to learn calculus in order to understand these equations.

### **MIT Reinforced that Culture**

One definition of culture is: "a set of particular shared attitudes of a group of people". I became a member of a small group of people that my high school peers called "nerds". I became so obsessed with mathematics I spent most of my time at a weekend Long Island teen age beach party in a bedroom studying calculus. I learned the girls weren't particularly interested in Maxwell's equations.

At MIT my mathematic preparation was rewarded with good marks. The entire curriculum was based on mathematics so my limited knowledge of more classical subjects was no handicap. My fraternity life was a different matter. The initial shock of fraternity social life gave way to my adoption to certain life styles that caused trouble in later life.

Then on December 7<sup>th</sup>, 1941 I was granted a BSEE degree and asked to join the NDRC Radiation Laboratory and participate in the development and then the manufacture of microwave radar. This reinforced and emphasized the engineering and scientific nature of my culture.

After the war I began my 61 year career in the creation and manufacture of new commercial products.

During that period I was gramted 37 patents. 6 were Important at the time and 5 are commercial today. Red squares mean important, orange somewhat less, yellow average, green not very, blue no importance.

Date	Idea or Invention	Pat- ent	1 <sup>st</sup> dec- ade	Today
1946	Photographic Electronic Flash: Founded Seminar Electric, 1 <sup>st</sup> studio & portable xenon flash products, went bankrupted	No		
1950	<b>Circular Fluorescent Machine:</b> new interactive, programmable rotary lamp production machine.	Yes 3		
1952	Electronic Flashing Approach System: for commercial and military airport visual landing systems	Νο		
1956	Halogen Movie Set Lighting: Sylvania awarded Oscar set lighting, I gave nomination presentation	Yes 3		
1967	Semiconductor Ballast: fluorescent lamp starter and control enabled standard incandescent socket use.	Yes 4		
1970	<b>Projector Headlights</b> : my most important invention, most all new cars today use it.	Yes 1		
1971	Heart Rate Monitor: mobile measuring pulse rate, 2 personal patents	Yes 2		
2002	Internet Weather Stations: Peek Electronic Products, personal company, son still running it, sold 3 patent licenses	Yes 2		

# Classical science couldn't explain it.

I used classical science such as Newton's laws of motion to develop these products and patents. It works to provide practical results and a career for me, but my culture was materialistic with no place for Christian beliefs. But in 1999 while in the midst of my technical career something happened.

While driving along route 101 in California to repair a software problem I saw this dynamic cumulus cloud formation over a cattle manicured green pasture. I for some unknowable reason stopped and parked to absorb the beautiful scene.

I automatically asked myself what kind of software was needed by the laws of nature to produce such complicated phenomena, who did the code. Then I recalled some people say God created the heavens and the earth. Maybe such a mysterious being designed that software. My cultural instinct said no. My reason said maybe. Yes, maybe? I'll discuss this with Beverly.



## Why doesn't Jesus Come?



- \* A picture of this image on the hospital entrance wall assured Beverly that Jesus was on his way.
- \* Did the laws of nature put that cross there or did God?

## I Was Alone!

Many at the Conservatory have had an experience similar to mine, but in many cases their religious belief has helped them form a new worthwhile life. I had the handicap of a materialistic culture created by a technological education and career. Those who have maintained their religious feelings throughout their life and career have an additional tool unavailable to those who have led a secular life.

I hope my example shows how all is not lost for those of a materialistic culture to find and to believe in a rational Christian theology. It may be difficult for one with a technical culture to obtain the full benefits of the Holy Spirit but it is still worth the efforts to learn why Christian belief is rational not just a thing of faith alone.

My move to Texas to be near my daughter subjected me to a Christian environment. Religion was therefore my first course of study. It was then followed by and extensive study of philosophy and other subjects.

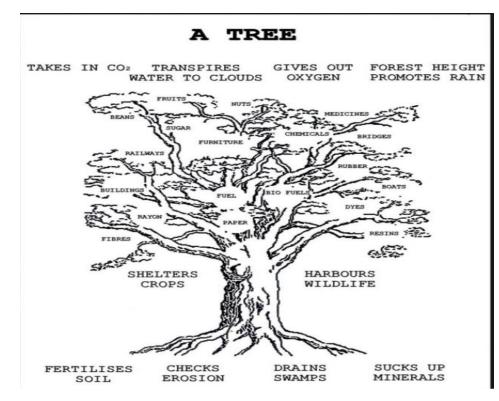
### Ancient Greek philosophy supported later Christian Doctrine



### Plato Aristotle

- Plato's philosophy was based on <u>immutable</u> and <u>innate</u> conceptual <u>forms.</u>
- Aristotle's was based on a material world of entities that we can sense and <u>logically</u> understand.

## Aristotle's Materialism



- Materialists say matter is the only reality
- Emotions and thought can be explained physically.
- Things out there have definable characteristics
- All things can be explained by universal deterministic laws of nature.
- Science is the only way to explain reality.

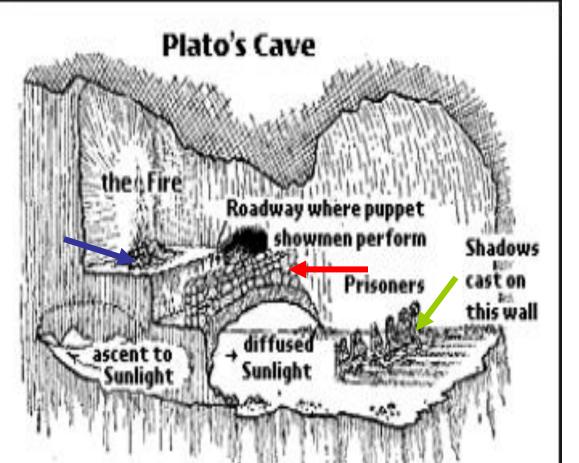
## Plato's Conceptualism



- \* **Conceptualism is the theory that** mental concepts determine reality.
- Reality is dynamic and constantly evolving new forms according to indeterminate divine universal laws.
- Scientific laws are only approximate.
- Beauty can be appreciated conceptually but not materialistically.
- I would like to have a picnic with Beverly under this beautiful tree.

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## Allegory of the Cave



Prisoners (green arrow) were chained for life facing the wall of a cave. Their only environment was the shadows on the wall cast by the puppets (red arrow). The fire (blue arrow) was the light source.

Plato described this scene in his book called "The Republic" to show metaphorically that one's real world is what he observes it to be.

## Which of These is Reality?

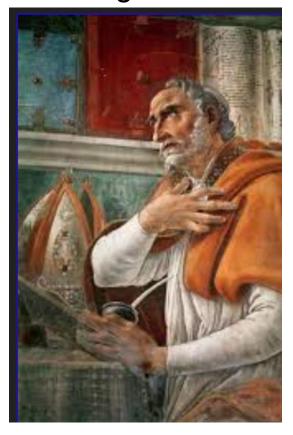
This ontological question has been argued throughout history with no final answer. I intend to show in this talk that conceptualism is the most rational answer to this question and allows Christian belief as well.

Scientific deterministic materialism has been shown to be in error by postmodern scientific experiments and theory and that conceptualism is an accepted scientific and philosophical ontology. Those who can accept the reality of conceptualism can then accept Christianity as a rational philosophy and that has no conflict with the new science.

Let us now explore how classical science evolved from a 17<sup>th</sup> century deterministic science into a post modern 21<sup>st</sup> century probabilistic science that supports conceptualism and in turn allows rational Christian belief.

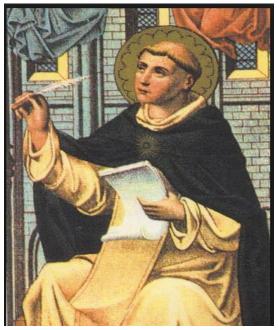
### Four Medieval Theologians employed ancient Greek philosophy in their theology

### St. Augustine 390



Abelard 1100

### St. Aquinas 1261



### Ockham 1334



### Middle Age Rational Christianity

These four medieval theologians led the way to a rational understanding of Christianity using either Aristotle's logic or Plato's conceptual forms. .

• **St. Augustine** used Plato's concept of innate, universal and unchanging forms to explain the reality of Christian scripture and doctrine as defined by the Council of Nicaea, 338 ad,

• Abelard envisioned the relationship between the rationality and the Trinity. God can be understood by analogy. He was distracted by Heloise's love for him.

• **St. Aquinas** used Aristotle's logic to prove the existence of God. Aquinas' acceptance of Aristotle's logic was the basis for intellectual medieval thought from 1270 through 1320. In 1277 a list of Aristotle's philosophies were condemned.

• Ockham's razor concept proposed only three categories of existence; substance, quality and relationships. He anticipated modern science's "Heisenberg's Uncertainty" and Complexity theories. Ockham began the slow shift toward the Enlightenment Period's scientific method.

They all had studied ancient Greek philosophy and used either Plato's or Aristotle's philosophies to support their beliefs.

### The Bacon"s Scientific Method



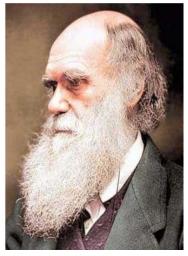
Sir Francis Bacon (1561 - 1626)



Isaac Newton (1693-1727)

- Francis Bacon created today's scientific method.
- Newton used this method and his new calculus to complete the transition to what he thought were God's universal laws of nature.
- At 88 after my first two years of study in Texas I realized these 17<sup>th</sup> century laws were not what God used to create the Universe and life within it. 19

### 19<sup>th</sup> & 20<sup>th</sup> century attempts to explain laws of nature







Charles Darwin 1809-1882

Albert Einstein 1879-1955

Niels Bohr 1886-1965

- Darwin's book, "Origin of Species" 1858 demonstrated that animal and human species evolved rather than being created as per Genesis 1.
- Einstein's quantum theory of light and general relativity, 1915 redefined what scientists claimed to be the laws of nature.
- Bohr invented quantum physics (1922) that the true laws of nature must included the role of human mind. This has been well confirmed by experiment.
- Einstein never accepted Bohr's theory and tried to prove it was incomplete even on his deathbed the night he died.

## The Foundations for Post Modern Science

**Darwin** was a Christian who believed that his theory of of evolution was the discovery of God's laws of nature. But the Scopes trial and other examples show how evolution conflicts with Christianity. Let us now explore how modern science eliminates this conflict.

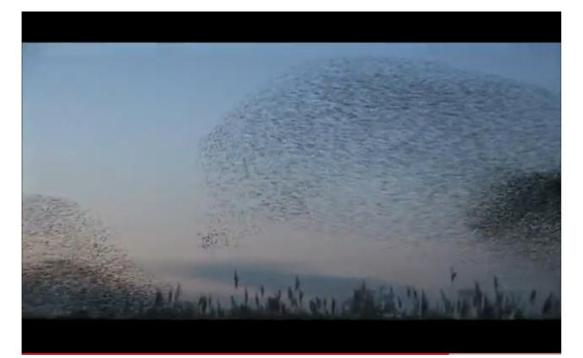
**Einstein** was granted his only Noble Prize for his theory of the quantum nature of light not his relativity theory. He laid the foundation for quantum mechanics that he later refuted passionately, even even on his deathbed. "God does not play dice!"

**Niels Bohr** debated Einstein for 30 years but experiments showed that the laws of nature were probabilistic and indeterminate. "God does play dice!" Bohr's quantum mechanics, the most confirmed theory of all scientific history supports the ontological reality of conceptualism and allows the rationality of Christianity including the Trinity and the Resurrection of Christ!

**Lenard Susskind** with other post modern scientists discovered five different theories that showed the world was made of tiny strings.

Bear with me when I provide an extremely brief explanation of why modern complexity, quantum, and string theories promote conceptual rather than material reality and thus allow rational acceptance of Christian doctrine. 21

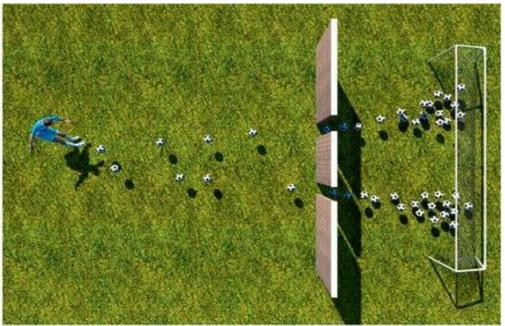
## Complexity (Chaos) Theory



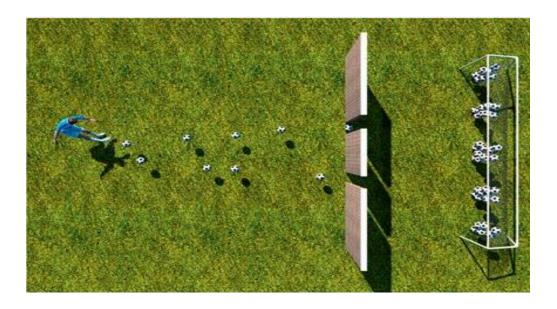
### **Three Flocks of Starlings**

- \* Chaotic bird groups forming organized flocks is explained by modern, 1968 theory of complexity.
- Classical physics was useless in the study of the world's predominate nonlinear phenomena. Weather systems is another example.

# Molecules are Particles & Waves at the same time

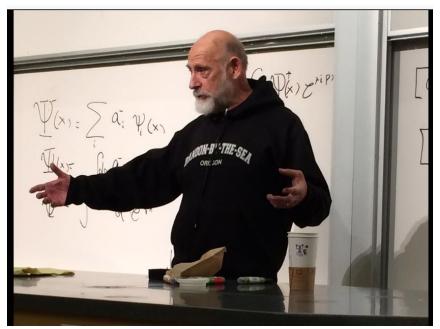


**Bucky balls as Particles** 



### Bucky balls as Waves From "The Grand Design", Hawking<sup>23</sup>

### New Science String Theory



Lenard Susskind

- Five theories with the same answer.
- Too small to test but mathematics says it is true.
- Explains the standard particle physics theory.
- Multiple Dimensional
- World is made of tiny strings
- Most accepted theory by postmodern physics.

## Indeterminate and Incalculable

These three theories can not be calculated, their equations solved by classical methods or understood without a fundamental change in he way one thinks. They are an attempt by modern scientists to explain God's miracles. There is another way out, however. Just accept Christian doctrine by faith alone.

These theories support the Christian doctrine of the holistic Trinity, Christ's resurrection, and the concept of God's grace for life hereafter. They do not support the addition of the word "forever" to that last sentence. The problem is with the interpretation of "forever" meaning for an infinite time. The new science dislikes the use of infinities. They must be eliminated or cancelled out. "Forever" is not only an unimaginable long time but it is scientifically impossible. The Universe has been around for 13.73 billion years, life for 2.5 billion and humans of our species for about 120 thousand years. Do you really want to be around even in the divine world after material humanity has long gone. I want my soul (information) to exist for as long as it has some chance and relevance to humanity that will be gone in two billion years. That's for eternity in my way of thinking.

## **Our Hereafter Limit**



- Two spiral galaxies colliding, viewed by Hubble telescope
- Our Milky Way and Andromeda galaxies will collide in two billion years.
- Our sun will either be sent off into space, destroyed by a black hole or other ill fates.
- Humanity will no longer exist.

## Engineer's Dilemma

An engineer, like myself has certain problems with one Christian doctrine.

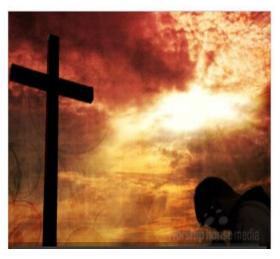
That Christian doctrine is expressed in the Catholic Catechism as: "Through the Holy Spirit we are restored to paradise, led back to the Kingdom of heaven, and adopted as children, given confidence to call God 'Father' and to share in Christ's grace, and given a share in '<u>eternal'</u> glory." If the word eternal is defined as one of the three dictionary definitions, I'm ok on accepting even that Christian doctrine. That definition is: "seemingly everlasting: seemingly to go on or recur incessantly." Most Christians, Catholic or Protestant use the definition which is: "existing through all time: lasting for all time without an end." Or in other words, for an infinite time.

Engineers dislike infinities such as: How many times can you put nothing into something? So I'm satisfied to say my soul will be distributed through out humanity including Christ for an eternal *(meaning seemingly)* long time, certainly not forever.

Am I a Christian? Yes, but probably not one who can participate in the Holy Spirit with its full benefits as one can who has had a lifetime of a particular Christian denomination. Maybe I will find a way to more fully accept the Holy Spirit before I leave this material world. I'm working on it!

## Next Step the Holy Spirit





Open the door to the reality of feelings!

As I write this conclusion I remember my last visit to Saint Anthony's service with my daughter's family. I was greeted with friendly smiles and gestures by our pew neighbors. I kneeled on the padded knee rest and read the words when others sang the songs they knew accompanied by beautiful organ music. When it was time for communion I sat there alone for a few seconds at our pew as my daughter, son in law and two grandchildren joined several hundred others to receive communion. I got up walked toward the Priest with my arms folded. The Priest laid his hand on my head and said "God bless you." I closed my eyes and felt the Holy Spirit and it was good.

I now feel I can pray to God. Almost every night I turn off the light and wait for the digital clock to read 11:11. I say a prayer and go to sleep knowing the Holly Spirit is with me. I will continue to work on devoting more of my time to feelings and prayer even though my culture discourages me from giving up analysis completely.