

*Theme: Where Science and Religion Meet*

# “God and the ‘Big Bang’”

Based upon a sermon series by the Rev. Adam Hamilton  
January 13<sup>th</sup>, 2008 at First United Methodist Church – Durango

Genesis 1-8 & 14-19

*1 In the beginning God created the heavens and the earth. 2 The earth was formless and empty, and darkness covered the deep waters. And the Spirit of God was hovering over the surface of the waters.*

*3 Then God said, “Let there be light,” and there was light. 4 And God saw that the light was good. Then he separated the light from the darkness. 5 God called the light “day” and the darkness “night.” And evening passed and morning came, marking the first day.*

*6 Then God said, “Let there be a space between the waters, to separate the waters of the heavens from the waters of the earth.” 7 And that is what happened. God made this space to separate the waters of the earth from the waters of the heavens. 8 God called the space “sky.” And evening passed and morning came, marking the second day.*

*14 Then God said, “Let great lights appear in the sky to separate the day from the night. Let them mark off the seasons, days, and years. 15 Let these lights in the sky shine down on the earth.” And that is what happened. 16 God made two great lights, the sun and the moon—the larger one to govern the day, and the smaller one to govern the night. He also made the stars. 17 God set these lights in the sky to light the earth, 18 to govern the day and night, and to separate the light from the darkness. And God saw that it was good.*

*19 And evening passed and morning came, marking the fourth day.*

## **SLIDE      God and the “Big Bang.”**

Please take out of your bulletin your sermon notes and your study guide. The sermon notes are a chance for you to follow along and write down things you might like to remember from today's message. On the backside is a study guide with Scriptures and questions that you might reflect upon each day. It only takes about five minutes a day but I think you'll find these passages tie back in today's message and they will speak to you throughout the week.

Last week we began a new sermon series entitled, "Where Science and Religion Meet." As we continue in that series of sermons we turn our attention this week to the area of physics. I have to tell you that I come at physics as someone who has a great deal of interest in the field but someone who understands very little. I have read a lot about physics and

in the last couple of months I've spent around 40 hours reading books by scholars, written for ordinary folks. The reality is that in three or four months worth of reading I won't be close to an expert in physics. I might understand a little more about physics than the average person who has not read much, but some of you sitting in this room will know a lot more about this than I do. Some have spent their lives learning about physics, studying this discipline and so it is a bit daunting and somewhat humbling to try and preach on this subject.

So my aim in this sermon is to offer you some of the basics from the field of physics on both of the cosmos and how we came to be here, and then how we understand the quantum world which is very small.

My area of expertise is not physics, but it is theology in the Scriptures. My hope is that we can begin to see where the connecting points are between what we learned in the field of physics and what we understand in the area of theology in the Scriptures. In the end I hope we can see how these connect my work together.

My goal is not to prove to you the existence of God through physics, though I do believe that if you study physics with an open mind and heart along the way you will say, "There has got to be something more—some intelligence behind us."

Finally, we will look and see what it is we learned from physics that might help us understand our faith more clearly.

My premise in this series of sermons is that science and religion can and should complement each other, much as Albert Einstein expressed it this way.

**SLIDE**      **“Science without religion is lame, religion without science is blind.”** Albert Einstein

Let's begin with the idea of the origin of the universe.

**SLIDE**      **The Origin of the Universe.**

In the Scripture passages that we read just a moment ago we read the Bible's account of creation. It is a wonderful and beautiful and poetic account. It is filled with power and wonderful ideas.

But we learned last week that when God inspired the Scriptures, God's intention was not to correct ancient peoples understanding of how the cosmos developed. God was not trying to teach the science.

God knew that over time human beings would uncover and discover wonderful things about the universe. If God tried to explain how God created everything to people 3000 years ago, would they have understood?

Would we understand today if God really tried to explain it all?  
Probably not.

So God is not concerned or trying to correct our cosmology in the Bible. God is very interested in correcting our theology and making sure we understand: Who is God? What is God's claim upon this world and our lives? What does it mean to be human? How should we treat each other? What is our purpose in life?

These are what the Bible is trying to teach us about.

So we come to the story of Genesis at the beginning of the Bible and if we look at this as a scientific account we will quickly be disappointed. There are things in the air which are hard to make sense of.

We have God creating light on the first day and yet we find on the fourth day God creates the sun and the moon. On the third day God created plant life. How was there plant life before there was the sun and the moon? How was the earth able to sustain any life without the sun which creates the gravitational fields upon earth? How are all these things possible?

If you try to reconcile all of this scientifically you will come up frustrated or you might come up with some really interesting ways of putting it all together that make little sense to someone with a scientific mind.

But if you understand that this was the understanding of the cosmos of people in ancient times, then simply look at what God is trying to say in the midst of that, you will hear a powerful word from God. The powerful word from God in this particular passage of Scripture from Genesis is that there is a God who created all things.

You remember that the Israelites came out of Egypt, and in Egypt the creation in itself was worshiped as gods and deities. There was the sun god Rah and the moon god Horace. There was the sky god Nut and the earth god Geb. All of these were worshiped in the writers of the book of Genesis. Genesis comes up with an absolutely revolutionary claim.

"All of those things you worshiped in the ancient near East as gods are really just part of the creation. There is a God who created all those

things and that God lays claim to all of them. Stop worshiping the creation and worship the Creator, for there is one God who is over all of those things. That God has a purpose and a plan. That God in his love created a creation which is good and not evil."

This is the statement that is being made and is revolutionary for its time. This is who God is and this is creation's relationship to God.

If I want to understand the truth with a capital "T" about why we are here and where we come from than I am going to turn to the book of Genesis. If I want to understand the mechanics of how it works, I will turn to the book of nature. I am going to turn to the scientists who theorize and put together mathematical formulas and models that will help us understand what happened in the first moments of creation and everything that has happened ever since.

### **SLIDE      The Big Bang.**

At first I thought I would do that this week by explaining to the basics that we all learned in high school science class on how the universe had its origins. The only textbook I still have from college is this one, The Dynamic Universe: an Introduction to Astronomy, by Theodore P. Snow. I went back and looked at the book and realized that rather than trying to explain the last 14 billion years to you, maybe it would be better to go to one of the experts.

So this last week I traveled up the hill to Fort Lewis College and met with Dr. Craig Tyler, a professor of astronomy and engineering. Dr. Tyler has taught several classes on the origins of the universe and we had a great time visiting. I think the true test of anyone's field of study is, "Can they explain it to ordinary people?"

So I gave Craig this challenge. I said, "Dr. Tyler, can you explain the 14 billion years history of the universe to our congregation in two minutes or less?" This is what he said.

### **VIDEO      The Big Bang**

### **SLIDE      The Big Bang.**

When I listened to Dr. Tyler's explanation I find it profound and interesting and intriguing. I realize that parts of it will change over the next 10 or 15 or 20 years. We continue to uncover new physical truths about how the universe was formed. In the last 100 years there have been radical

changes in how scientists look at the universe.

A hundred years ago most scientists would tell you that the universe had always existed. It was a static view of the universe and that it existed forever and it would exist forever. The universe was unchanging and eternal according to most scientists.

If you would have asked a scientist, "How can anything be eternal?" And they would simply answer, "It just is. Just trust us. The universe is the one thing that has always been eternal."

But in the early 1900's there was a physicist named George Lemaitre who came forward and said, "I don't think that is right. I think that all of the galaxies are moving apart from a central point and if you trace back the place where they had their beginning you would come to a place that is one central starting point."

He proposed what we know of as the Big Bang theory.

Lemaitre proposed that from something the size of an atom everything that exists came into being at a particular point in history. That was disturbing for many people who were scientists who said, "If it started at a certain point and the universe is historical, than what came before that? What triggered the Big Bang? What started it and where did that one atom come from?"

All of these were questions that sounded very theological and natural and were disturbing for some scientists, but not for Lemaitre, who had come to believe that the evidence in physics pointed towards the reality of a divine intelligence.

**SLIDE      George Lemaitre**

So, in 1923 he not only continued to practice physics but he also went to seminary and was ordained as a priest. He saw that these two things were meant to go hand-in-hand. He did not try to teach religion in his physics classes or physics and his religion classes, but he believed that both were sources of truth if we were to understand alternate reality. I included this quote in your sermon notes. He once said.

**SLIDE      "There were two ways of arriving at the truth. I decided to follow them both." –George Lemaitre**

That is my hope for you as a congregation—that you would recognize that there are two ways of coming at the truth when it comes to the origins

of the universe and you decide to follow them both.

Last week we talked about the two books from which we derive truth as Christians. The first is the book of nature. We study nature and how it works and it teaches us something about truth.

Then there is the area of Revelation and what God has revealed to us about himself. That teaches us the rest of the story.

One without the other is incomplete. I love to find out how the universe was created and as Dr. Tyler was describing it I realized I could sit there for hours and listen to this and pick his brain.

But for sheer beauty and understanding the meaning behind the universe, I will take the beginning of the book of Genesis any day.

**SLIDE      "In the beginning the Lord God created the heavens and the earth, and God said let there be light, and there was. And God saw that it was good."**

Last week one of the children who was in worship asked me a question. She asked, "Where did God come from?"

That is one of those questions that every kid has asked along the way, and so do many scientists. Probably every grownup is asked this question, "Where did God come from?"

The scientists say, "If you are going to say God is the first then you have to answer that question about where God came from?"

Do you know the answer I give the scientists? It is the same answer they gave to us a hundred years ago about where the universe came from. "God is the only thing that was never created. God has always been."

That answer was good enough for those in science until 100 years ago. If I have to determine whether the universe is eternal or whether God who created it is eternal, it is more likely to me that there is a God who started everything else.

Having said all that, I might be wrong. We might get to heaven and God will say, "You were all wrong about that. I did have a beginning and here's how I came to be."

Until then the best answer I have for a little girl is, "I just don't know, but I think God has just always been forever and ever." Scientists accepted that kind of answer when it came to the universe until very recent times.

**SLIDE      The Vastness of the Universe.**

Let's talk a little bit about the vastness of our universe. We have a thumbnail sketch about how the universe came into being, but what about our place in this universe? You remember of course that we are part of the solar system. Our solar system has one sun or star in the middle of it and there are nine planets that orbit around the sun. We are just a tiny neighborhood of course in the entire cosmos.

Here are some pictures someone sent me recently that you might find interesting.

**SLIDE      Earth to Pluto.**

**SLIDE      Jupiter to Pluto.**

**SLIDE      Sun to Pluto.**

**SLIDE      Sun to Arcturos – the 4<sup>th</sup> brightest star on the sky.**

**SLIDE      Sun to Antares – is the brightest star in the constellation Scorpius and the sixteenth brightest star in the nighttime sky.**

I read a metaphor from the University of California to help us understand the hugeness of the cosmos. If the planet earth represented our entire universe then our solar system would be the size of one microbe of bacteria. One microbe of bacteria on Earth would be the size of our solar system relative to the entire cosmos.

We live in the Milky Way galaxy. The Milky Way looks something like this.

**SLIDE      Milky Way.**

This picture was taken by the Hubble deep space telescope and is considered a cousin of the Milky Way. As you look at this particular galaxy you will see that is swirling. It has arms and our place in the galaxy would be about three quarters of the way from the center.

We are in an arm called the Orion arm. That is our specific neighborhood in the universe.

You know at night that when you see the Milky Way galaxy you can't see it this way because you're living in the middle of it. We will never be able to see it like this. We can only look back into it and so on a dark night you see the waving, milky ribbon of light in the sky and you are looking back

into the galaxy.

Our galaxy is made up of 200 billion suns like ours. Until a hundred years ago scientists thought this was the entire universe. But with the advent of technology we have come to find out that our galaxy is not the only one in the entire universe. Our galaxy is only one of 100 billion galaxies like it across the cosmos.

Several years ago the Hubble deep space telescope focused its attention on an area the size of a postage stamp if it were held out from your arm. It was the darkest spot they could find and this is what they saw.

**SLIDE      Galaxies.**

Every single one of those lights is a galaxy with hundreds of billions of stars in each one. This is the vastness of our universe.

When we look at this from a theological perspective we find ourselves saying, "God is much bigger than I thought."

I realize that in my own life I tend to think that the entire universe revolves around us, and sometimes around me personally. I get disappointed when God doesn't do what I ask at a particular moment. I want to live a long time and I want my life to go a certain way and I am expecting God will answer my prayers, as if God has nothing else to do except to tend to my every want and need. That is sort of our perspective sometimes as humans.

What the universe teaches us as we study it is that there is a lot more out there than just us. God is in the farthest reaches of the universe and watching as the new stars are being born. God takes delight in those moments. The Scripture says that...

**SLIDE      "God knows each one of those stars by name."**

There are hundreds of billions of stars in each one of those galaxies. God is watching as sometimes those galaxies collide into one another. God sees farther than our Hubble telescope and he holds all those things together. That's what God is doing.

Physics teaches us the vastness of our universe, but what the Bible tells us about God is that despite the fact that there is a huge universe that you don't even know about, God says, "I still know your name. I know your name and I care about you. You belong to me and you are my children."

What an awesome thing.

You see why we need both books—both the revelation of God in the scientific revelations.

I look at the stars and I see the images from the Hubble deep space telescope and I'm reminded of the words of Psalm 8, verses 3-5.

**SLIDE**     ***3 When I look at the night sky and see the work of your fingers—the moon and the stars you set in place—4 what are people that you should think about them, mere mortals that you should care for them? 5 Yet you made them only a little lower than God and crowned them with glory and honor.***

Our response is found in verse nine.

**SLIDE**     ***O Lord, our Lord, your majestic name fills the earth!***

We looked at the vastness of the universe and its past and how it was created, but let us turn to the future of the universe for just a moment.

**SLIDE**     **The Future of the Universe.**

Here once more we find a connecting point between physics and theology. Theology and physics are both interested in origins. Theology is interested in the vastness of God and physics is interested in the vastness of the universe. Physics is also interested in how the universe will end. It projects what might happen in the future.

Let's take a listen to how physics describes what the end of the universe might be like from Dr. Tyler.

**VIDEO**     **End of the Universe.**

I found several things intriguing about Dr. Tyler's description of, "dark energy." First of all it is a mystery, but mostly what I found interesting is that it sounded an awful lot like our understanding of sin in theology. Sin is what separates us from God and from each other and this "dark energy" is literally driving galaxies and space away. I just found that fascinating.

The Bible is also interested in the future and what might happen at the end of our universe. We call this, "eschatology."

**SLIDE**     **Eschatology.**

The Bible offers us a picture of the end that is not cold, dark and lonely—where our sun finally burns out or draws the earth into its

gravitational field and everything is burned up.

The Bible does not describe the end as coming in billions and billions of years but that it seems like it might come sooner. This is how the Bible describes the end of the earth book of Revelation, chapter 21:1-5 & 23.

**SLIDE**     ***1 Then I saw a new heaven and a new earth, for the old heaven and the old earth had disappeared. And the sea was also gone. 2 And I saw the holy city, the new Jerusalem, coming down from God out of heaven like a bride beautifully dressed for her husband. 3 I heard a loud shout from the throne, saying, "Look, God's home is now among his people! He will live with them, and they will be his people. God himself will be with them. 4 He will wipe every tear from their eyes, and there will be no more death or sorrow or crying or pain. All these things are gone forever." 5 And the one sitting on the throne said, "Look, I am making everything new!"***

***23 And the city has no need of sun or moon, for the glory of God illuminates the city, and the Lamb is its light.***

I don't doubt that physicists are laying out for us the future of the universe as best they can tell with no divine intervention at all. What the Scriptures say is that God holds the entire universe in his hands. God wrote the introduction and he knows the conclusion.

The conclusion isn't cold, dark and lonely. The conclusion is a new heaven and a new earth and we will dwell with God and he will wipe away every tear from our eyes. This is a picture of the end of times as the Bible describes it.

We talked about the big picture and the beginning of the universe and how fast it is. We talked about the future of the universe. But physics is also interested in very small things and really tiny things.

Physics tells us that this podium is not really made out of wood, but at the very smallest level is made up of atoms which are in a constant state of motion. They have a nucleus with neutrons and protons and electrons constantly revolving around the nucleus.

Most recently physics has told us there are even smaller levels and that there are three quarks for every neutron. There are three quarks for every proton and three quarks for every electron. All those quarks come in six different flavors and they tell us about all kinds of other particles.

This actually made my brain hurt to even think about all this. I can hardly imagine how things function at a subatomic level.

What I find really intriguing is that when scientists begin to talk to us about the quantum level of how things operate there, I begin to get excited because the language they use sounds very much like the language we use to talk about God.

Part of what they say is that our human language actually falls short and cannot really express the mysteries of life at that level. They say, "You will just have to trust us on this because we know it doesn't make any sense and logically doesn't fit together, however it really is this way."

The classic example is light which behaves as both a particle and a wave. You say, "It has to be one of the other. Which one is it? Is it a particle or wave?"

The physicist says, "No, light really is both at the same time."

We asked, "How is that possible and how can that be?"

"We don't know it just is and you have to trust us on this one."

So once more I asked Dr. Tyler if he could explain to our congregation the quantum level and quantum mechanics in two minutes or less and here's what he said.

**VIDEO     Quantum Mechanics.**

**SLIDE     A realm of knowledge where language fails – Quantum and God.**

This is exactly what the theologian says when we start asking questions about the nature of God. We asked questions about God and we say, "Now wait a minute, how can God be three in one?"

Christian orthodoxy says that God is Father, Son and Holy Spirit and yet there is one God. How could Jesus to be on earth addressing God the Father and praying to the Father in heaven when he is also God in the flesh? How does that work?

How can Jesus be both divine and human? Theologians say, "We don't know the answers to that. What we know is that our language is limited and we try to wrap our minds around these concepts of how things can be both this and that. It may not make sense in the world in which we live, and yet God is far more complex than that. You'll just have to take it

from us that this is the way it works, and then when we get to heaven we will figure it out."

I have a feeling that when we get to heaven we will look at God and say, "Wow—so that's how it works!"

Right now we can't see how it all works and our language is too limited. When you ask the physicist how we can know that light is both a wave and a particle they will tell you, "It just is. We know it does not make sense logically but it really is this way and you will just have to take our word for it, because some things are so complex and you will never be able to see it but it really is the way we have described to you."

I think, "Yes, that is right. God is far more complex than electrons and subatomic particles." God is the author of all those things. There are certain things that we will never understand and all we can acknowledge is that it is a phenomenon that we experience and when we get to heaven someday we'll figure that out.

Physics proposes there are a number of forces that are very important in the world but we can't see—things like buoyancy and gravity and "dark energy." Those things act upon us but we can't really see them.

Once more I think of theologians who say that this is exactly how God operates. We can't see God. We can't look under a microscope and see God and yet God is a force that acts upon us.

You can't see gravity but it causes these keys to fall to the earth when I drop them. They don't just fall but they are drawn to the earth by a force called gravity yet we can't see it.

**SLIDE      Electromagnetic Force.**

We know there is an electromagnetic force that causes the electrons to be bound around the nucleus of the atom. We know it is there and it is a powerful force.

So it is with God. We cannot see God but we experience the impact of God. We see the evidence of God in what God does even though we can't see God personally.

That gets me thinking, "Can we see God?" I think of on Einstein's great formula  $E=MC$  squared.

**SLIDE       $E=MC^2$ .**

I'm guessing that if I asked you what that means that most of us wouldn't really know. We know that  $E = energy$  and  $M = matter$  and  $C$  is the speed of light squared. All matter is energy and there is a great deal of energy in a small amount of matter that can be unleashed if you can accelerate it at the speed of light squared. Part of what Einstein was telling us is that everything ultimately is energy.

This gets me thinking about God. When the Bible talks about God it says there is a, "Glory" to God, there is a light to God and a radiance to God. I have always thought of God as pure energy and pure personality.

When God led the Israelites to the wilderness how did he appear? He appeared as a column of fire. When the glory of the Lord entered his Temple there was a radiance that was overwhelming.

When Moses said, "Let me see you." God said, "No human being can see my glory and survive in the experience." Then God appeared to Moses in a burning bush—once again fire which is energy.

When people have near-death experiences we hear them talk about moving towards a light.

So I wonder if we were actually to gaze upon God's glory in the heavens if we might not see pure energy and pure light just as John's gospel describes Jesus as the light of the world.

This gets me thinking about us—you and me—and what happens to us when we die. What will our bodies look like? We have a soul and we can't really identify where it is but we know there is an energy that constitutes who we are. It somehow intersects with our brain and we believe that transcends our human body.

When our body is finished working our soul goes on beyond this life. The Scriptures tell us we receive the new body. What does that new body look like? I don't know, but it might very much look like light or pure energy.

When I begin thinking about this I think about a question that one of our kids asked me recently.

**SLIDE      "Does Jesus wear clothing in heaven?"**

I have never thought about that before but it is a really good question when you're a kid. Do you want to know what I said?

I said, "I think when you see Jesus in heaven he will mostly look like

light." That passage we read from Revelation said there will be no more need for a sun because God himself will be the light for the people. I think it will be pure energy we see when we look at Jesus.

However, when we read the Gospels we find that after his resurrection from the dead he did at times appear in human flesh. He took on various forms as he interacted with people. Energy can be arranged in various expressions of matter and so Jesus appears first as a gardener to Mary Magdalene. Then he appears as a stranger to the disciples as they are walking to the town of Emmaus. Then he appears as a fisherman on the seashore when the disciples are out fishing.

Finally, Jesus appears as himself in a form they recognize and they can see the scars on his hand and his side. This tells me that Jesus was able to arrange his matter in a way that was the most helpful at a given time to appear in the form that people most needed him to appear.

This tells me that it is possible that Jesus will appear to us and be exactly as we need to see him. Perhaps we will see them as he looked here on earth. If that happens and he arranges his energy in a way to take on matter than I'm guessing he will take some of that energy and make sure he has some clothes on.

That was my answer to the child; that I think Jesus will appear as light most of the time, but if he appears as a matter he will certainly have clothes on.

All of these things are what physics get me thinking about as a Christian. That leads me to one final thought.

**SLIDE Conclusion: God and the Grand Unifying Theory.**

Physicists have been looking at the cosmos and they have been telling us some pretty amazing things. They tell us that the fact that you exist is really almost impossible. Some scientists would say that it is such impossible odds that it is almost a miracle that we exist as humans—that life actually exists in this universe.

Some people think there is life on all kinds of other planets out there. I think that there might be life on some planet somewhere out there. But scientists tell us that it is a rare thing if there is.

The confluence of things that had to happen and the factors that had to come together in just the right way at just the right time to make sure that

this planet could support life were amazingly slim.

One scientist said that the odds of life forming on our planet the way it has would be like if you were standing in outer space and you threw a dart towards a dart board on planet Earth with a bull's-eye the size of a single atom—and you hit it. If you can hit that single atom from outer space with a dart then you have some idea as to the miraculous nature of our universe and the fact that this planet supports life.

Steven Hawking puts it this way when he describes the thoughts that go into talking about how remarkable it is that life is on this planet.

**SLIDE** "The remarkable fact is that the values of these numbers (these constants and mathematical equations and physics) seem to have been very finely adjusted to make possible the development of life.

For example, if the electric charge of the electron had been only slightly different than stars would have been either unable to burn hydrogen and helium (which are ultimately necessary for life) or else they would not have exploded in which case the stuff of life would not have been spewed into the universe.

It seems clear that there are relatively few ranges of values for the numbers that would allow the development of any form of intelligent life. Most sets of values would give rise to universes that, although they might be very beautiful, would contain no one able to wonder at their beauty."

Lee Strobel in his book The Case for the Creator quotes several different folks along this line. Discover magazine notes that, "the universe is very unlikely, deeply and shockingly unlikely."

Owen Gingrich, senior astronomer at the Smithsonian astrophysical Observatory notes,

**SLIDE** "A common sense and satisfying interpretation of our world suggests the designing hand of a super intelligence."

Mathematical physicist Paul Davies notes,

**SLIDE** "I cannot believe that our existence is a mere quirk of fate, an accident of history, an incidental blip in the great cosmic drama."

This once more is where religion and science come together.

Assigned to the explanation for our existence in the cosmos is that it just happened. It was a roll the dice. Maybe there were hundreds of billions of universes that were formed and this just happened to be the only one which could support life.

The idea goes something like this. I want you to look at this room. We remodeled it two years ago and added on several other parts to the building. We have about 500 people who come through this building on a weekend. There are tons of steel and concrete in this building. There are miles of cable in order to provide all the things that you see in here. Here are the plans that we needed for construction.

What if you were to ask me, "Who was a contractor and who built this facility and how was it put together?"

What if I were to say to you, "There was no contractor? There were no architects. There was just this little piece of concrete, and we just waited a long time—and that little piece of concrete eventually sprung up into a structure. It generated its own structural steel. It came together in the form that you see here. Metal formed from cabling and it happened to just lay itself out in the right places. We just stood back and watched and it was really awesome. Aren't we lucky that all this came from one little piece of concrete?"

What would you say about me if I told you that? I am pretty sure you would say, "Call the paddy wagon and get Pastor Jeff a little white suit." You would say I was nuts!

I realize that that may be an intellectually satisfying response for some scientists when it comes to the creation of the universe. These are the blueprints for this building. There are roll after roll of these of what it took to build this space and some pretty smart people to figure it out.

So when I look at the cosmos and realize that what we do in this building looks silly compared to the entire universe. I look at this and I say, "If you are asking me to believe that all of this came from nothing with no one designing it, and no energy behind it, no intelligence underneath it—that takes too much faith for me."

I preach faith. I am a person of faith, but that is just more faith than I can muster up. This takes me back to the Scriptures, or the book of Genesis says these words.

**SLIDE** “In the beginning the Lord God created the heavens and earth, and God said let there be light and there was light, and God saw that it was good.”

So here is how I leave this place. We look at all the things that the physicists tell us and we admire and appreciate their work. But we also say, "There has to be something more."

We have experienced something more in our personal lives through prayer and worship. We have seen that unseen Creator as we read our Scriptures.

We think we have seen the unseen Creator most clearly when we look at Jesus Christ who was the alpha and the omega, the beginning and the end, the first on the last. God is the great, "I am." God is being itself. God is life in the light of the world. As Paul said in quoting the poet and philosopher Epimenides:

**SLIDE** “In him we live and move and have our being.” Acts 17:28

Let's pray.

*Oh God we stand in awe of the creation. To think that you are in the farthest reaches of the universe where the Hubble telescope still can't peer and you see the forming of galaxies and stars.*

*Oh God you were here when life first began on this planet, and we believe that you are the One who brought together all of the factors that made it possible.*

*You delight in creating and we praise you for that. Thank you for allowing us the mental capacity to understand something of your creation and your universe. The more we learn, we are driven to our knees in humble awe and adoration for the majesty and the glory of your name. In Christ's name we pray. Amen.*

**Theme: Where Science and Religion Meet**

***“God and the Big Bang: Our Amazing, Miraculous Universe”***

Genesis 1-8 & 14-19

*1 In the beginning God created the heavens and the earth. 2 The earth was formless and empty, and darkness covered the deep waters. And the Spirit of God was hovering over the surface of the waters.*

3 Then God said, "Let there be light," and there was light. 4 And God saw that the light was good. Then he separated the light from the darkness. 5 God called the light "day" and the darkness "night." And evening passed and morning came, marking the first day.

6 Then God said, "Let there be a space between the waters, to separate the waters of the heavens from the waters of the earth." 7 And that is what happened. God made this space to separate the waters of the earth from the waters of the heavens. 8 God called the space "sky." And evening passed and morning came, marking the second day.

14 Then God said, "Let great lights appear in the sky to separate the day from the night. Let them mark off the seasons, days, and years. 15 Let these lights in the sky shine down on the earth." And that is what happened. 16 God made two great lights, the sun and the moon—the larger one to govern the day, and the smaller one to govern the night. He also made the stars. 17 God set these lights in the sky to light the earth, 18 to govern the day and night, and to separate the light from the darkness. And God saw that it was good. 19 And evening passed and morning came, marking the fourth day.

## **Introduction**

"Science without religion is lame, religion without science is blind." Albert Einstein

### **I. The Origin of the Universe: The Big Bang**

Science's prevailing theory of the origin of the universe and Genesis 1

"There were two ways of arriving at the truth. I decided to follow them both."

Georges Lemaitre

### **II. The Vastness of the Universe**

How large is our universe? How small are we in it? Science and religion respond.

"What are human beings that you are mindful of them, mortals that you care for them?" -- Psalm 8

### **III. The Future of the Universe**

Eschatology – the physicist's answer, the Bible's answer.

"I saw a new heaven and a new earth; for the first heaven and first earth had passed away." Revelation 21

### **IV. The Make-up of, and Laws that Govern, the Universe (at the Quantum Level)**

A realm of knowledge where language fails – Quantum and God

"Does Jesus wear clothing in heaven?"

## **Conclusion: God and the Grand Unifying Theory**

"In him we live and move and have our being." Acts 17:28 and Epimenides

## **Study Guide**

**Monday, January 14** – As you begin your study guide readings, open with a word of prayer, inviting God to speak to you as you reflect upon the scriptures in the light of yesterday's sermon. The last two weeks Pastor Jeff noted that God's intention in the Bible was to speak of theology, morality and spirituality, not to attempt to explain science. As you read Genesis 1:1-19, what does this passage teach us about God, God's role in creation, and the creation itself? What implications might this passage have for how we are to live in relationship to God and in relationship to the creation? In what way does this passage line up with modern scientific theory about the origin of the universe? How is it inconsistent with what we know from science? How do you reconcile the two?

**Tuesday, January 15** – How vast is the universe? Remember that if the universe were the size of planet earth, our solar system would be the size of a single bacterium. What do you think God is up to throughout the rest of the universe? Christian theology teaches that God holds the entire universe together – and that God is present in the farthest reaches of the universe. Do you think there could be life on other planets? Though life is so rare, it seems, throughout the universe, what relationship would God have to life on other planets? How would God's salvation story have been told? What questions does this raise? With regard to the sheer size of our universe, we can feel pretty small – read Psalm 8 where the writer felt this smallness, but then offers a biblical understanding of our place as humans in God's universe. How does this passage speak to you? What should our response be to the vastness and the majesty of space?

**Wednesday, January 16** – Both physics and the Bible offers us a picture of the future of the universe. What is the physicist's picture of the future of planet earth? Of the universe? The Bible offers us a contrasting picture of the future of the world – in some ways similar to what the physicist teaches, and yet a much closer horizon and filled with a great deal more hope. Read Revelation 21 – 22:6. Where do you see connecting points between the Bible's picture of the future and the physicist's picture? How are they different?

**Thursday, January 17** – We spoke briefly last weekend about how things operate at the subatomic level. Look at your notes to see what connection that conversation had with Christian faith. Scientists find that language is inadequate, as is our mental capabilities, for naturally making sense of how things work in the realm of sub-atomic particles. Things that are illogical and seemingly incompatible are logical and compatible in that realm. How does this relate to our understanding of the nature of God and our attempts to understand God? Scientists tell us that matter is energy and that it is possible for that energy to be changed into a different form – we suggested that this might be a helpful way of looking at the soul, and the new body Paul speaks of that we receive at death. How might these two ideas be interrelated? Read I Corinthians 15:35-58. What does this say about what happens to us when we die? How might Jesus' own appearances after his resurrection help us understand the nature of our life after death? Physics does not prove any of these ideas about the nature of God nor about the afterlife, but it does demonstrate that there is a realm of our universe that our scientists are uncovering that works in much the same way that theologians have said theology, God and heaven work.

**Friday, January 18** – Invite a friend to join you for worship this weekend as we speak about Evolution and Creation – a very timely topic that is regularly in the news. We'll wrap up this week's study by reading the Apostle Paul's sermon to the Greek philosophers in Athens. Read Acts 17:16-34. What does Paul teach us about God? About the universe? What does he mean when he quotes Epimenides saying, "In Him we live and move and have our being?" Why would some theologians consider God to be the "Grand Unifying Theory" physicists long for? What role does God play in the Big Bang? In writing the laws of the universe? In continuing to oversee creation? In guiding the cosmos? In holding together the entire universe? In sustaining and guiding us as human beings? Take the time to thank God for creating a universe that is able to

support your existence. Scientists note that the odds of such a universe existing are astronomically small – the factors that had to come together to support human life on this planet are almost unfathomable – naturalistic science attributes it to luck, theology to God.