INTRODUCTION

I want to talk today a little bit about one of my favorite subjects: Science. Some might wonder if it is appropriate to talk about science in church and I think the answer is absolutely yes. And I'd like to start by reviewing some of the progress we've made through scientific advancements over the last hundred years.

One hundred years ago, the best view we had of the moon was through the high-powered telescopes of the time. And of course, now we've been to the moon. We've even got a commemorative stamp. We even talk about our favorite inventions. One of my favorites is the GPS device. The best GPS device they had a hundred years ago was a sextant. It is really a very ingenious device. If a ship captain knew exactly what time it was and the relationship of the sun or the moon to the horizon, with a little trigonometry, he could figure out where they were on the planet.

And what I get to do every day is also something that's been heavily impacted by science. At the right, you see a modern operating room in 1909. And one of the reasons we know it is modern in 1909 is because of the guy at the head of the table, an anesthesiologist. Can you imagine surgery without anesthesia? That's how surgery was for most of human history, until the fairly recent invention of anesthesia. I get to use optics, work in a sterile



Operating Room c. 1909

Dr. Charles Gordon

operating room and see the wonders of God's creation every day.

Sometimes my family likes to talk about our favorite inventions. My kids' favorite invention is either Andy's Frozen Custard or texting. We all know that along with the blessings of science, there is a dark side. We have problems like scientism, or the worship of science, the death of wonder. We've had to invent words for things that we do now, because of our multitasking society. We have to do things like burn the candle at both ends; we have to live lifestyles. Ever since the invention of the electric light bulb, we've lengthened our days and shortened our nights. We tend to get very caught up in the information and the materialism of this age and it is very depressing and I think it leads us away from God.

So what is the antidote to the modern info materialism? I'd like to take you back with me to a place and time about 40 years ago, when my family packed up our bags and we went to La Jolla California and stayed in a motel, back when there were motels on the beach in southern California. One evening, I noticed we were next to a public park. There were a lot of people gathered at the beach and as the sun came began to sink, I noticed something happened in unison: The volleyballs quit bouncing around, the Frisbees stopped flying and everyone stood to take in the marvelous spectacle of the sunset.

I have always been a sucker for a good view. In fact, one time much later when I was a father and got to decide which route to travel, we took the scenic route to Colorado. We spent an extra eight hours driving to our destination and everyone got carsick. But interestingly enough, as we

sit around the table and talk about our favorite trips, that road trip invariably comes up. Why is that? It is because of the beauty we saw.

People go to a lot more trouble than just an extra-long car trip to appreciate beauty. We find that thousands of people actually lose their lives every year just trying to get a better view. Are they crazy? It turns out, they're *not* crazy. What psychiatrists have taught us, and what I learned in medical school, is actually the ability to appreciate beauty is a litmus test for good mental health. If you put someone in front of that beautiful sunset at La Jolla or in front of Niagara Falls and they were disinterested, you'd have to wonder what was wrong. Is there is there an organic brain syndrome? Is it depression? Is there some sort of mental illness occurring? If someone cannot appreciate beauty, then we know they're not normal. And it is interesting to know this fact of beauty is actually very troublesome to atheists. Non-believers love to complain about how nothing seems fair and how there are lots of bad things that happen and true enough, there are bad things that happen and we do have problems. But you get an atheist to talk about beauty and he or she starts to stutter and stammer, because they know if there is such a thing as true beauty, that means there are absolutes and that means there is an absolute God.

Dr. Elaine Scarry, an English professor at Harvard University, says this about beauty. "The beautiful, almost without any effort of our own, acquaints us with the mental event of conviction, and so pleasurable a mental state is this that ever afterwards one is willing to labor, struggle, wrestle with the world to locate enduring sources of conviction—to locate what is true. Both in the account that assumes the existence of the immortal realm and in the account that assumes the nonexistence of the immortal realm, beauty is a starting place for education. (*Beauty and Being Just*) In the last sentence, she's talking about how we all recognize there is such a thing as beauty and she says, "Both in the account that assumes the existence of the immortal realm," that's us, those who are Christians. "And the account that assumes the non-existence of the immortal realm." That's non-Christians. Unfortunately, I'm afraid that's most professors at Harvard these days.

Beauty is a starting place for education. Doesn't that sound nice? The fact is the Bible tells us beauty is much more than a starting place for education. And what I'd suggest to Dr. Scarry is that in the Bible the heavens declare the glory of God, as in this picture of the sunrise over the earth. There's never been a generation in history that's been more privileged to witness the beauty of God's creation. You can actually Google this image and see it as it happens on YouTube. It is really a magnificent spectacle. In Romans 1:20, Paul tells us that "For since the creation of the world God's invisible qualities—his eternal power and his divine nature—have been clearly seen, being understood from what's been made, so that men are without excuse." And my thesis today is if you'll look at this view and a lot of other pictures I'm going to share with you, is that there is a God who is the author of beauty and he has a distinctive, recognizable style.

Let's take a moment and look at some famous artists and their styles. Claude Monet lived a couple of hundred years ago and he was an impressionist painter. He was the father of impressionism. He didn't so much want to paint the actual image he saw; he wanted to create an impression. And you'll notice you do not have to be an art critic to recognize that all these paintings have a very similar style.

In the same way, Paul Cézanne greatly disappointed his father when he decided not to become an investment banker and chose to be a painter instead. Cézanne was the founder of modern art. He tried to show a picture from several different angles at once using different brush strokes. And you do not have to be famous to have a distinctive style—any preschool teacher will tell you all of his or her pupils have a distinctive style. These drawings were made by my daughter Grace last year. Grace was five at the time and I didn't have to ask her to sign her paintings to know they were hers.

The first time I recognized there was a Creator and that this Creator had a distinctive style was actually very surprising to me. I'd been studying really hard, working to try to pass my boards in neurosurgery and I'd been up late at night. You know how you get when you've been in the library for hours on end and you kind of get zoned out? I was driving home and on the way, I saw an image. And I thought I thought I saw a Purkinje cell on the side of the road. Now a Purkinje cell is not on the side of the road, trust me. They're tiny cells in the base of your cerebellum. These are the cells that are important for coordination. And they have an arbor and a very rich interconnection. They are the cells that allow you to ride a bike and never forget how to ride a bike. They're not oak trees. And as I was driving home, I



Claude Monet

Sunlight Under the Poplars Red Poppies at Argenteuil Claude Monet c. 1887 c. 1873



Hillside in Provence Paul Cézenne c. 1890-92

View of Auvers-sur-Oise Paul Cézanne c. 1874



thought I'd seen this Purkinje cell on the side of the road and I was afraid I'd gotten trapped in a bad movie and then I realized, no, it is not a Purkinje cell, Charlie. It is an oak tree. When you look at these two images, you have to ask yourself: What do these have in common? And the answer is really nothing, except they share a common Creator. A Purkinje cell is a microscopic cell in your cerebellum and an oak grows from an acorn and become thousands of times heavier than a man.

I found there are numerous designs and similarities like this one and I'd like to share a few with you. I also learned that many of these design similarities are helpful in illustrating spiritual principles.

1. THERE IS A COMMON CREATOR OF THE UNIVERSE AND EVERYTHING IN IT

The first spiritual principle is there is a common Creator of the universe and everything in it. This is really Romans 1:20 paraphrase. The view from the Monument Valley in Utah is very commonly used in western movies, it is very distinctive. Compare that to the Pillars of Creation. These are enormous nebulae 7,000 light years away. One of these clouds is one light year long, so if you got in the space shuttle and traveled for 2,000 years, you'd make it about 1/10th of the way down this cloud. It is so enormous, it is mind-boggling. Scientists tell us these clouds are actually where stars are formed and it reminds me of something scientists term the anthropic principle. The anthropic principle says there are certain principles, certain laws that are in operation in our world, laws like the strength of



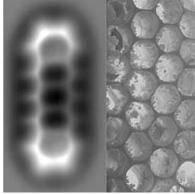
Monument Valley, Utah

Pillars of Creation Eagle Nebula

gravity, or the strength of a magnetic field, the strong and weak nuclear magnetic forces. There are about twenty laws like this, things we simply cannot deduce—we just have to go out and measure, and they operate throughout the universe, without exception and we have no idea why. For instance, if gravity were just a little bit stronger or a little bit weaker, we would not exist. It is almost as if we've won the lottery every day of our lives. And imagine if I played the lottery and won every day of my life, don't you think the gaming commission would come knocking at my door? It is remarkable how the odds are stacked in our favor.

Personal application: God planned you from the moment of creation

The personal application and another way to say this anthropic principle, is simply that God planned you from the moment of creation. There is strong scientific evidence that supports what I'm saying. At the right are images of a honeycomb and a sheet of carbon that looks very much like a honeycomb pattern. What's so interesting about carbon is it is the dust we're formed of. Carbon is not only in your pencil and in diamonds, but carbon makes up the clothes we wear, the food we eat, the fuel we use, carbon makes up your DNA. We're made of water and carbon, basically. Carbon has unique properties that allow it to bond to different elements and give us incredible combinations. An interesting thing about carbon is that it's very hard to form.



Carbon Sheet

Honeycomb

Fred Hoyle was an English astronomer who postulated that we could only form carbon out of helium in certain very specific conditions, about a 100,000,000 degrees. He looked around and he saw how much carbon we have on our planet and he postulated that the inside core temperature of most stars would work out to be about a 100,000,000 degrees. Sure enough, a few years later, some researchers from his laboratory were awarded the Nobel Prize back in the late 1950s, because they discovered stars' temperatures are about a 100,000,000 degrees or 7.6 million electrovolts. You would think professor Hoyle would have been thrilled with this discovery, but he was very disturbed, because professor Fred Hoyle was an atheist, as were most professors especially in the late 1960s. He wrestled with this and finally in 1982, he wrote in the prestigious *Annual Reviews of Astronomy and Astrophysics* these words: "A common sense interpretation of the facts suggests that a superintellect has monkeyed with physics, as well as chemistry and biology, and that there are no blind forces worth speaking about in nature. The numbers one calculates from the facts seem to me so overwhelming as to put this conclusion

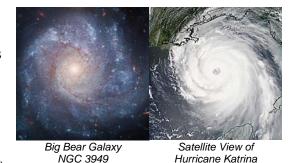
almost beyond question." Never let anyone tell you that you have a blind faith, because nothing could be further from the truth. And it is something we do not hear very much in our popular literature today, but Fred Hoyle became a believer because he simply did what Paul says to do in Romans 1:20, and that is he looked at creation.

2. JUST AS THERE ARE PHYSICAL LAWS, THERE ARE ALSO SPIRITUAL LAWS

The second principle is just that there are physical laws, there are also spiritual laws. What you're looking at here, of course, is a rose and the inside of a nautilus shell. And what strikes me about these is, if you look at them for a second, don't you find them beautiful? I bring a rose home to my wife when I am in trouble. We are intrinsically drawn to the beauty of the rose and to the nautilus. And it is not because there are mathematical principles behind these. We do not really understand *why* we find them beautiful.



We find this spiral pattern throughout nature, in large galaxies and in hurricanes. There's a galaxy called the Big Bear galaxy that's on your left. This galaxy is so enormous, it is 100,000 light years across. So if you got in a spaceship and traveled the speed of light and traveled your whole life, we would not be able to see you move across this galaxy; we would not be able to see you move a micron, because it is so enormous I cannot wrap my head around how big this



galaxy is. And of course, on the right is a picture of a hurricane, which looks to me very similar. I first noticed the similarity when I was sitting in this room. David showed a picture of Hurricane Katrina and asked us to pray. And I noticed there was a there was a similar theme there.

Amazingly, this beautiful, artistic spiral pattern shows up not only in an enormous galaxy but also in something as microscopic as a grain of sand. You can even find it on a pinecone and in a grain of sand. So here we have the same pattern repeated over and over again; from a galaxy as enormous as the Big Bear galaxy to a little tiny piece of sand. And what's so amazing is there is a mathematical principle behind this called the Golden Ratio, a mathematical constant,





Pinecone

Grains of Sand

first described about a thousand years ago in Italy by a mathematician named Leonardo of Pisa or Fibonacci, as he was know to his friends. The Golden Ratio is a sequence of numbers beginning with zero. Each of the subsequent numbers is the sum of the previous two numbers, which in effect, creates spirals.

Personal application: I can learn more about the author of spiritual laws by reading His book

Our second personal application is I can learn more about the author of spiritual laws by reading His book. The cochlea is the hearing organ located under your ear. These spiral patterns you have in your skull allow you to hear. It reminds me of these physical laws we see in operation over and over again that just *are*. In other words, when the Wright brothers were learning how to fly, they didn't telegraph the newspapers and say, "We're writing up some new





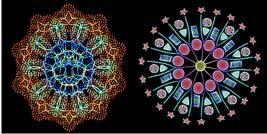
Human Cochlea

Spiral Seashell

aerodynamic laws." No, they said, "We are studying the existing principles and trying to understand these aerodynamic laws and learn to fly." And sure enough, these aerodynamic principles existed long before the Wright brothers, but now because we understand them, we're able to harness these laws and we can fly almost anytime we want. In the say way, I submit there are spiritual laws that are just as reliable and as inviolate as the physical laws and we learn about these spiritual laws in this room every Sunday.

3. YOU ARE UNIQUELY DESIGNED FOR A PURPOSE

One of the most important precepts taught in the Bible and one and our next principle that we're going discuss is that we are fearfully and wonderfully made—you are uniquely designed for a purpose. You're looking at a tube of DNA, end on and a diatom. You and I know a diatom as pond scum. You see it in East Texas in the spring. It is the green scum that gets on top of a pond. Algae are actually living beings. When you look at them under a microscope,



DNA, End View

they have very remarkable and beautiful patterns. But what's even more interesting is that no two are alike, just as no two snowflakes are alike. And just as your DNA is unique to you, even though it is this beautiful pattern, it is unique. Why did God design us with so much diversity? I have no idea. But I will tell you one thing, the Bible does promise that he knows the number of hairs on your head, just like your fingerprint is unique; a zebra's pattern is also unique. God planned you from the moment of creation. From the moment of creation, he sat this universe in order with these laws and these principles and he foreknew you and you can trust him with every detail of your life.

Personal Application: You can trust God with every detail of your life

Our next personal application is you can trust God with every detail of your life. What you're looking at here is the inside of a retina. This is a fluorescein view of a retina. When an ophthalmologist injects a



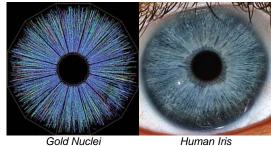
Fluorescein View of a Retina

Lightning Over Water

little dye, you can see the blood vessels light up and it looks very much like lightning over water. Brother David talked about this a couple of months ago in his message "The Storm Before the Calm," and I'd encourage you to get that CD and listen to it about every month, because we all face storms, don't we? Things are tough down here on earth. But what I got out of the pastor's message is: Don't you know that when Jesus got into the back of that boat, he *knew* he was heading into the teeth of a gale? Yet he was able to go to sleep anyway. Why is that? Because Jesus knew he was the author of creation and he also knew something about storms: They don't last.

4. EVERYTHING WILL CHANGE

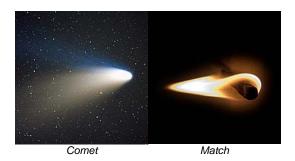
The fourth spiritual principle is everything will change. This is another really interesting pairing I want to share with you. On the on the right is another view of the eye, the one we are normally used to seeing, this is the iris and the ciliary bodies help the pupil enlarge and get smaller to accommodate for light. The image on the left is not an iris at all, but rather what happens when you collide two gold nuclei together in a cyclotron in Brookhaven National Labs.



Gold Nuclei
Particle Collision

Chemists used to think once you got something down to its basic elements, like gold or silver or oxygen, these elements could not be changed, but we're discovering everything is subject to radical, immediate change. What happens when you bang these gold nuclei together? You find a quark gluon plasma and the gold disappears into a vapor of quarks and neutrons. The Bible tells is in 1 Corinthians 15:52 that "In a flash, in the twinkling of an eye, we all will be changed."

We're learning that principle is true even in science. A corollary to this principle that everything will change is that things are not always what as they seem, and we know that to be true. Compare a match and a comet. I used to think a comet was just a fiery, blazing ball orbiting the sun, but actually, nothing's father from the truth. The glow we see from a comet is the reaction of matter and antimatter. It is the annihilation of matter as antimatter. As electrons.



protons and neutrons are sent out from our sun, they cause the comet to glow, but it is not hot or burning at all.

Personal application: We understand in part now, but one day we will understand fully

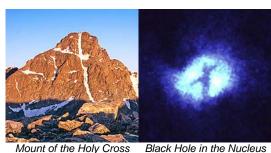
I do not understand everything, with is the final personal application. I do not understand antimatter and everything that happens on this side of heaven. We understand in part now, but one day we will understand fully. For example, what do a cypress tree and polymorphite crystals have in common besides the fact that they're both green? One is a tree, one is a rock, but have they have a creator in common.



This reminds me of the time when my youngest daughter was learning her colors. Green was definitely her favorite. And you know how kids are when they're little; they'll point out their favorite color and say, "This is green." "Look at this. This is green." And it occurred to me if a child were born colorblind, it would be very difficult to describe the sensation of green to that child. You could say green is the color of grass or it is the color envy or greed or it is the color of money or the Wicked Witch of the West—but you really haven't described green until you've seen it. And in the same way friends, I think we are all colorblind this side of heaven. In 1 Corinthians 13:12, Paul says, "We see now as a poor reflection in a mirror." He also says in Philippians 1:21, "For to me, to live is Christ and to die is gain." To die is gain? Doesn't that sound a little bit odd to you? How can Paul say "to die is gain"? I think the reason Paul was able to say that with such confidence is because he took a backstage tour of heaven. He was able to step out of time and to understand for a short period what it was like to live in a world that wasn't bound by time at all.

CONCLUSION

There are a lot of other similarities and pairings I'd love to share with you, but I want to close with one of my favorites. I think this last pair of images is really stunning. On the left is the Mount of the Holy Cross. This is a mountain I have had the pleasure of viewing several times, both in winter and in summer, and I have to say no picture does this mountain justice. It is an enormous, awe-inspiring mountain and the cross etched in the face of this mountain is over a thousand feet tall. It is really inspiring.



ount of the Holy Cross Black Hole in the Nucleus of Galaxy M51

On the right, something that I will never see without the aid of a telescope, is the pinwheel galaxy. Astronomers call it M51. And right in the center of this galaxy is something very interesting. There is a black hole sucking in debris in all the time. Astronomers do not know why, but the debris seems to be coming in at perpendicular angles, forming the shape of a cross. I think we have an idea why there's a cross in the heavens, and it is right there in Romans 1:20.

You remember what Fred Hoyle said earlier about how there is a superintelligence that's monkeyed with the laws of physics? I have no way of comprehending the size and scope of the universe any more than an ant has an understanding of the New York subway system. Two thousand years ago, this Superintelligence came down and took the form of a man, flesh and

bones, and he lived a perfect, sinless life and stretched out his hands and died for me as a perfect sacrifice on a cross at Golgotha. I know this because 11 of his 12 disciples were martyred, insisting they had seen him alive again from the dead. You do not have be a cell biologist to know a person doesn't die an agonizing death on the cross and then spend two nights and three days in a tomb and come walking out on the other side without that person being the author of life himself. And so I'd like to offer that you take with me the Romans 1:20 challenge. In Romans 1:20, God promises if we look at his creation we will find evidence of him. God is in your creation. He is active today and he will show up if you look for him in the most unexpected places. And I hope you never look at an oak tree quite the same again.

OUTLINE

"For since the creation of the world God's invisible qualities—his eternal power and his divine nature—have been clearly seen, being understood from what's been made, so that men are without excuse." Romans 1:20

1. THERE IS A COMMON CREATOR OF THE UNIVERSE AND EVERYTHING IN IT

Personal application: God planned you from the moment of creation

"For those God foreknew he also predestined to be conformed to the likeness of his Son, that he might be the firstborn among many brothers." *Romans 8:29*

2. JUST AS THERE ARE PHYSICAL LAWS, THERE ARE ALSO SPIRITUAL LAWS

Personal application: I can learn more about the <u>author</u> of spiritual laws by reading His book

"All Scripture is God-breathed and is useful for teaching, rebuking, correcting and training in righteousness." 2 Timothy 3:16

3. YOU ARE UNIQUELY DESIGNED FOR A PURPOSE

Personal Application: You can trust God with every detail of your life

"Cast all your anxiety on him because he cares for you." 1 Peter 5:7

4. EVERYTHING WILL CHANGE

Personal application: We understand in <u>part</u> now, but one day we will understand fully

"Now we see but a poor reflection as in a mirror; then we shall see face to face. Now I know in part; then I shall know fully, even as I am fully known." 1 Corinthians 13:12