

### Welcome

Today we're going to try to resolve a fight that started in 1609. That was the year a young Italian scientist named Galileo Galilei invented the telescope. With this simple light amplification device, Galileo was able to explore the surface of the moon in detail, seeing mountains and valleys. He was also able to discover the four largest moons of the planet Jupiter - moons we still to this day call the Galilean moons.

The telescope also allowed Galileo to prove decisively a scientific theory he had long suspected was true: that, contrary to what the Church taught, the Earth was not the center of the universe - a theory introduced years earlier by Copernicus.

Galileo first published his findings in 1613, and they caused an uproar - many in the Church felt he was contradicting the Bible and undermining the foundation of Christian faith. After a trial in 1616, Galileo kept silent, but after a new pope was appointed, he resumed his work, leading to a massive trial in 1633 where the Church forced Galileo to renounce his findings.

He did so.

Of course, today, we know Galileo was right. And contrary to what those church leaders feared, accepting that the Earth is not the center of the solar system or the universe hasn't broken our faith.

In fact, it took more than 350 years, but the Church officially apologized to Galileo and admitted he was right about the nature of the universe. A lot of people thought it was too little, and way too late.

Since the days of Galileo, a lot of Christians have seen a conflict between faith and science - especially when the findings of science contradict what the Bible teaches. But it doesn't have to be that way. Moreover, it *shouldn't* be that way.

Today, we're going to explore faith and science and see how we can view science not as an enemy of our faith, but an essential aspect of how we know God better.

That conviction is grounded in our belief that God is our creator.

### Message

[Series Master Slide] During the Summer, we're asking one basic question: How do we know God? We began last week with the conviction that, if God is our creator, then God is knowable. God is knowable because God *wants* to be known and, by becoming human in the person of Jesus, made himself knowable.

We have four major sources of knowing God: Scripture, the record of God's interactions with us throughout history; Reason, our ability to think and learn and discover; Tradition, how others on the journey of faith have known God; and Experience, what we learn about God from our own lives.

Throughout the summer, we're going to dive into each of those four sources of knowing God, and ask how we can know God better. We began with Experience, exploring how we can know God better through what happens in our lives - our private practices and acts of service both in relation to others. Next, we explored Tradition. From our local Catalyst experience to the global church, we saw how sharing in the faith experiences of others helps us know God better.

For the last couple of weeks, we've been exploring the third source of knowledge, Reason. We began by defining Reason - it's our ability to understand, to synthesize information, to make sense of the world around us. Last week, we explored what it means to think more like God, to let the way Jesus thinks become the way we think.

Today, we're exploring the antagonism that keeps many Christians from embracing science and the findings of science. I was raised in a church that taught a strict, fundamentalist interpretation of the Bible that rejected much of contemporary physics, biology and chemistry. I was told growing up that the Bible teaches the Earth is only 6,000 years old and that anyone who suggested otherwise was a dangerous non-believer. Our church brought in so-called creation scientists to prove to us how wrong and dangerous other scientists were - they sounded not unlike those church leaders who condemned Galileo. They drew a hard line in the sand: you can believe the Bible, or you can believe the findings of science. You can't believe both.

We're going to talk more about the Bible in just a couple of weeks. But today, I want to talk specifically about science. What is it, and how do we as Christians get it wrong?

Obviously, this is a huge topic, and we've only got 20 min, so we're going to be at 30,000 feet today. But I want to show you that Science is a tool we have developed to hone our ability to reason. It's something that can work in tandem with Scripture, sharpening our understanding of who God is and inviting us into a deeper relationship with God.

When we use the word 'science' we're referring to a system of organizing knowledge. But not just any knowledge: scientific knowledge relates to the natural world. Whether it's the periodic table of elements, the classification of life Kingdom, Phylum, Class, Order, Family, Genus, Species or the Laws of Motion and Thermodynamics, we assign categories to the world. We observe how it works, run experiments to verify hypotheses, and check each other's work. We prove or disprove theories, make new theories and test those too.

Science is a constantly growing and evolving body of knowledge we create together. It's a structured, formalized way to know more about the world around and within us.

[Scripture Slide 1] Turn with me to Romans 1. A couple of weeks ago, we discussed a few of the many people who are both scientists and persons of faith, individuals for whom Reason has opened a pathway to know God better. Those people resonate with what Paul wrote to the Church in Rome:

Ever since the world was created, people have seen the earth and sky. Through everything God made, they can clearly see his invisible qualities—his eternal power and divine nature. -- Romans 1:20

I'm not sure how we ever got the idea that science was anti-God with this verse in the Bible. Paul said that we can know God - who God is, what God is about - through exploring the natural world. Because the creation bears the fingerprints of the creator.

And keep in mind, Paul isn't just claiming here that the world proves there's *a* god. Paul wrote in a context where everyone believed in *some* god or gods. Paul is specifically claiming here that the God who became incarnate in the person of Jesus, the God of Abraham, Isaac and Jacob, the same God we're gathered here today to worship, this *specific* God is knowable through creation.

Reason leads us to faith in God.

[Scripture Slide 2] Paul wasn't making up a new theological claim. The idea that we can know God through creation is an ancient Jewish idea, grounded in the conviction that God created the world. So much like we can know artists through their art, we can know God through God's world. This conviction is enshrined in the book of Proverbs, which describes Wisdom - a life lived in relationship with God - as an integral aspect of the creation of the world. Wisdom speaks here, saying:

"I was there when he established the heavens, when he drew the horizon on the oceans. I was there when he set the clouds above, when he established springs deep in the earth. I was there when he set the limits of the seas, so they would not spread beyond their boundaries. And when he marked off the earth's foundations, I was the architect at his side. I was his constant delight, rejoicing always in his presence. And how happy I was with the world he created; how I rejoiced with the human family!

"And so, my children, listen to me, for all who follow my ways are joyful. Listen to my instruction and be wise. Don't ignore it." -- Proverbs 8:27-33

God's instructions are woven into the fabric of creation. The way we order our understanding of the world points us back to God.

[Scripture Slide 3] The New Testament writers push this idea even further. It's not that God's power is woven through creation. It's that God himself, the one we know in the person of Jesus is woven through creation. Drawing on the Wisdom imagery of Proverbs 8, John describes Jesus as the divine Word at the opening of his Gospel:

In the beginning the Word already existed. The Word was with God, and the Word was God. He existed in the beginning with God. God created everything through him, and nothing was created except through him. The Word gave life to everything that was created, and his life brought light to everyone. -- John 1:1-4

When we get to know creation, we get to know Jesus himself. Jesus is all through the created world, holding creation together, making it all work together. So as we know the world better, we know God better.

What does this look like?

So glad you asked. Let's talk about quantum mechanics. Until the early 1900s, physicists believed the atom was the smallest unit of matter - the word atom actually comes from the Greek word 'indivisible'.

But in the early 1900s, scientists like Max Planck and Albert Einstein made discoveries that weren't consistent with classical physics. It took about two decades for Werner Heisenberg - a Christian! - to put forth what today we call quantum theory: that there are particles smaller than atoms, smaller than protons and neutrons and electrons.

And here's the really weird part: once you get smaller than atoms, the laws of physics break down. Scientists have a really hard time describing the behavior of these subatomic particles.

Take quantum entanglement, for instance. In a paper published by scientists from NASA's Jet Propulsion Laboratory, Francesco Marsili asks us to imagine two protons, A and B. Alice takes proton A and Bob takes proton B. They separate them by hundreds of feet - far enough apart they can't talk to each other. Alice and Bob run all kinds of experiments, and when they compare notes, it turns out the protons always behaved in the exact same ways at the exact same time. Even though they're separated by distance, they're still connected in some inexplicable way.

Here's a quote from Kirster Shalm one of the other physicists who co-authored the paper: **"It's as if Alice and Bob try to tear the two photons apart, but their love still persists."** -- Kirster Shalm

Quantum physicists reach down past the place where laws make sense, and they're only able to speak in terms of relationships. To describe the force at the heart of the universe, they use the word 'love'.

Love at the heart of the universe, love that is below and beyond law? As my revivalist friends would say, "That'll preach!"

We have got to move past the idea that science is an enemy of faith. Because we're doing real damage to the faith of those God created to be scientists. Take Galileo - he was a devout Catholic believer. He didn't see his work as a threat to faith. Quite the contrary: his discoveries made him love God all the more. Before his trials, he prayed:

**"Infinite thanks to God for being so kind as to make me alone the first observer of marvels kept hidden in obscurity for all previous centuries."** -- Galileo Galilei

But the Church repaid him with public, professional humiliation, demonizing him as an enemy of the faith.

I know too many people who love science - whose brains are wired for reason, to look at the world and make sense of it - who have been met with skepticism and anger from Christians.

Those who are scientists among us deserve our love and respect. Much as theologians help us know God better, so too do the scientists among us. God has given them gifts to know God's world better, to know God in a unique and beautiful way. Our scientists are a gift to the Church and to all of us who long for a deeper relationship with God.

### **Communion + Examen**

[Communion Slide] Jesus invites us to know him through the physical world.

1. How has God been present to you in creation in the past week?
2. How have you ignored or taken God's presence in creation for granted?
3. How can you be present to God in creation this week?

### **Assignment + Blessing**

Reflect on how you know God through God's world. Have a conversation about faith with a science minded person this week!