IN THE BEGINNING GOD a sermon by Dr. David Palmer, United Methodist Church of Kent, June 17, 2018 based on Genesis 1:1–5; Psalm 33:6–8

The sermon this morning is a continuation of a sermon series entitled, "Why Believe." In the first two sermons in this series, we considered how human beings through the ages have come to believe in a divine Reality primarily because they experienced that Reality in life. God, we noted, was not so much a proposition to be proved, but a Reality to be encountered. At the same time, human beings through the centuries have come to see that belief in God can be rationally grounded in many ways; and those various ways of finding rational grounds for belief in God have come to be known as "proofs" for God. Each proof has a technical name. Last week, we considered the "ontological argument," which deduces the necessary existence of God from the idea of God that people universally have in their minds. If you want to know more about that argument and others that we will be discussing during this series, you can get the book that will be appearing at the end.

This morning we will continue our journey through the classic "proofs for God." We noted last week that these actually are not so much proofs but pointers to God. They involve observing the world and seeing the evidence that points to the reality of God. This morning we are looking at the nature of the universe as a whole. Let us begin with a moment of prayer...

Why is there something rather than nothing? From Plato and Aristotle through Thomas Aquinas up to the present time, philosophers have observed that everything that exists, or everything that happens, has a cause. When it rains, this is caused by clouds; but of course the clouds are caused by other physical events, and those events had a cause, and so on. Behind every observed effect there is a cause, which itself is the effect of a prior cause, in a perpetual chain of cause and effect. But, as Aristotle observed, the chain of causes cannot extend back infinitely, "for the series must start with something."ⁱ Obviously, at some point there must be a First Cause, a Prime Mover, an Uncaused Cause. As the Bible declares, "In the beginning God." (Genesis 1:1)

This basic line of reasoning is now called the *cosmological argument* for the existence of God, because it points to the existence of the cosmos as a foundation for belief in God. God is the necessary origin of all that is.

In recent decades, the thrust of the cosmological argument has been developed in a further direction, as people have considered not only why there is something rather than nothing, but why there is the particular something that exists rather than the many other possibilities that might have been. What scientists have observed is that our universe consists not only of matter and energy, but a particular arrangement of physical rules and parameters that appear to have been set in an extraordinary way. Several decades ago, Fred Hoyle, a physicist, and a self-professed atheist at the time, hit upon this as he was

pondering the amount of carbon in the universe. You probably don't sit around wondering why there are so many carbon atoms in the universe—this is the sort of thing that physicists think about—but this is of course significant, since all life is made out of carbon atoms; if there were not much carbon in the universe, we would not be here. Fred Hoyle was studying nucleosynthesis, the process by which elements are formed in stars, and he observed that not much carbon should come out of this. The only way that very much carbon could be produced, he found, was if, out of a huge range of possible values, the carbon atom in its development just happened to have a very specific resonance, or energy level, and if other physical properties of carbon and other atoms involved in nucleosynthesis also happened to be established at very specific, but unlikely levels. What he discovered was that all these physical values were at precisely the levels required to result in the formation of a large amount of carbon, the building block for life. He called this a "monstrous coincidence." How is it, he thought, that carbon just happens to have this very improbable set of properties that are exactly what is needed for a universe that will sustain life? Hoyle concluded,

"Would you not say to yourself, 'Some super-calculating intellect must have designed the properties of the carbon atom, otherwise the chance of my finding such an atom through the blind forces of nature would be utterly minuscule.' A common sense interpretation of the facts suggests that a superintellect has monkeyed with physics, as well as with 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."ⁱⁱ

Hoyle thus became one of many physicists to observe a kind of remarkable "Goldilocks effect" in the universe as a whole—the physics are "just right" to produce a universe that will support life. For example, if the energy of the Big Bang at the start of the universe had been a little less, the universe would have fallen back on itself long before life could appear; but if the energy had been a little more, the density of the rapidly expanding universe would have dropped too quickly for stars or galaxies to form. The "bang" at the beginning was set just right. Stephen Hawking made a similar point when looking at the subatomic world. He said, "The laws of science, as we know them at present, contain many fundamental numbers, like the size of the electric charge of the electron and the ratio of the masses of the proton and the electron ... The remarkable fact is that the values of these numbers seem to have been very finely adjusted to make possible the development of life."ⁱⁱⁱ The physicist Paul Davies likewise noted that a whole host of physical properties have a "just right" setting. He put it this way:

"Life as we know it depends very sensitively on the form of the laws of physics and on some seemingly fortuitous accidents in the actual values that nature has chosen for various particle masses, force strengths, and so on. If we could play God, and set values for these natural quantities at whim by twiddling a set of knobs, we would find that almost all knob settings would render the universe uninhabitable."^{iv}

The universe appears to be finely tuned, so as to be conducive to life. As Owen Gingerich observed, "Many details are so extraordinarily right that it seems the universe has been expressly designed for human life."^V This of course is exactly what the Bible declares. The opening chapters of Genesis proclaim that God created the world with the intent that it would have life, at the pinnacle of which would be human beings. Science has made clear that such a life-sustaining universe, if it had to arise by pure chance, would be extravagantly unlikely. But this is exactly the universe we have. Thus the universe has every appearance of being what the Bible describes—a universe intentionally produced by a Divine Creator.

How else can one account for the amazingly fortuitous conjunction of all the physical laws and values necessary for a world that is ideal for human life? One possibility, of course, is that we just got lucky. In the grand cosmic role of the dice, all the right numbers just happened to come up. Another suggestion, popular among those looking for *some* explanation other than God, has been that maybe there are an infinite number of universes, with infinite arrangements of physical values, so that ours is simply the one with all the right values for life. But this "multiverse" theory has always been highly conjectural, with no evidence to support it; and it has recently been further undermined by Stephen Hawking's last paper, in which he denied the concept of infinite random universes, and argued instead that the entire cosmos must be governed by the same fundamental physical laws.^{vi} Those laws have an extraordinary structure, amazingly conducive to life. As Hawking's partner, Thomas Hertog, observed, "The laws of nature we observe in our universe appear to be very special, delicate, in a sense."^{vii}

How then does one account for this "just right" universe? The only reasonable explanation for the fact that the universe appears to be fine-tuned for human life is that the universe has in fact been finely tuned by God.

That is exactly what is described in the opening verses in the Bible. In those brief, poetic verses, there is a remarkable correspondence with how physicists now describe the beginning of the universe in what is commonly called the Big Bang. Before the Big Bang, they tell us, there was nothing—no structures of any kind, just darkness. Then, in an instant, the universe exploded into existence, and the first thing to emerge was light.

The Bible says precisely the same thing, just adding in who was the source of it all. "In the beginning," says Genesis, "... the earth was without form and void, and darkness was on the face of the deep ... and God said, 'Let there be light.' And there was light." (Genesis 1:1–3)

It is particularly remarkable that the writer of the book of Genesis would speak of light bursting forth before there was a sun. This of course is what science now tells us that there was light from the big bang long before any stars formed—but in ancient times, everyone knew simply that light on earth comes from the sun. Even in poetic writing, like Genesis 1, it was completely counterintuitive to talk about God creating light long before God created the sun. So how did it occur to anyone to write this? It is one more example of the inspiration of Scripture.

Another remarkable feature of the first verses of Genesis is the statement that in the beginning God created "evening and morning, the first day." (Genesis 1:5) In other words, God created time—which physicists also tell us began with the big bang. Genesis 1 is not intended to be read as a science textbook; but it is striking to observe the correspondence between the Biblical Word and science when it comes to the origin of the universe.

But of course the further question—the foundational question—is: what stands before the Big Bang? What set all things in motion? What established all those physical parameters that would produce the incredible universe that human beings now occupy and perceive? Whatever stands before the Big Bang must be beyond space and time, but must also possess infinite power and wisdom, in order to produce the incredible universe that now exists. That is a rather perfect description of God.

Centuries ago, church leaders liked to say that God has given us two books by which we can come to understand the wisdom, power, and magnificence of God. One is the book of Scripture. The other is the book of Nature. In the structure and glory of the natural world we can come to understand something of God. It is notable that the book of Scripture and the book of Nature are telling us the same thing—that the only way we can account for our existence, and the existence of all things, is by acknowledging the reality of God.

But then the Scripture would draw us to a further key step. In the passage we heard from Psalm 33, the Psalmist considers how God has created all things; as the Psalm declares, "By the word of the Lord the heavens were made, and all the heavenly bodies by the breath of his mouth. God gathered the waters of the sea as in a bottle, and the deeps in storehouses." (Psalm 33:7–7) Using poetic imagery, the Psalm describes how God not only brought the universe into being but established its order. But then the Psalm continues, "Let all peoples on earth revere the Lord; let all the inhabitants of the world stand in awe before God." (Psalm 33:8) God's books of Scripture and Nature are designed finally not only to make us aware of God, but to move us to reverence and a response to God. So we are drawn to acclaim God as our Creator and to lift our hearts to God in worship and praise.

¹Aristotle, <u>Metaphysics</u>, Beta, 4.

¹¹ Fred Hoyle, "The Universe: Past and Present Reflections." <u>Engineering and Science</u>, (November, 1981) pp. 8–12

ⁱⁱⁱ Stephen Hawking, <u>A Brief History of Time</u> (New York: Bantam Books, 1988), p. 125.

^{iv.} Paul Davies, "The Unreasonable Effectiveness of Science," in <u>Evidence of Purpose</u>, p.49.

^{v.} Owen Gingerich, "Dare a Scientist Believe in Design," in <u>Evidence of Purpose</u> (New York: Continuum Publishing, 1994), p. 23. ^{vi} S. W. Hawking and Thomas Hertog, "Journal of High Energy Physics" (April, 2018). ^{vii} Thomas Hertog, Interview with the European Research Council, May 2, 2018.