



Danielle (Runner up)

Are We Alone in the Universe?

Look up at the night sky on a clear evening, and it is almost impossible not to have something stir inside you—a sense of awe, maybe a bit of wonder. That vast, dark canvas speckled with so many stars appears reassuring and intimidating at the same time. Each one of those stars is a sun, and most of those suns have planets circling them, just like our own sun. Some of those planets might even be similar to Earth. This inquiry has been a part of humanity for as long as we can remember. It is woven into ancient myths and religions, coloured philosophies, and instigated a myriad of stories in books, films, and television. But it is no longer a matter of fantasy or religion only—it's one of today's most urgent questions of science. Why? Because the possibility of life beyond Earth links with something deep within us—a mix of curiosity, optimism, and even fear. For a long time, Earth was thought by scientists to be very special—possibly even a cosmic anomaly.

However, due to space missions and new telescopes, that has radically changed. We now know that Earth-like planets are remarkably common. There are already thousands of exoplanets discovered orbiting stars in our galaxy alone, and a great number of them are in what astronomers call the "habitable zone." That's the sweet spot around a star where temperatures could be just right for water to exist in liquid form—a big ingredient of life as we know it. And where there's water, life just might follow. But this is not just a scientific enigma—it's deeply personal and philosophical. If there is life out there, what does that do to us? Are we still special? Unique? Or are we just one example of something much bigger—a tiny burst of consciousness in an endless cosmic ocean?

In the 1960s, astronomer Frank Drake tried to put some discipline into this vast unknown with what has come to be called the Drake Equation. It is a try at estimating how many intelligent civilisations there might be in our galaxy—ones that are able to communicate across the stars. The formula splits the problem into variables such as the frequency of star formation, the number of stars with planets, the number of planets that may be habitable, and the probability of intelligent life emerging and giving rise to technology. But there's the catch: most of those numbers are still just wild guesses. The Drake Equation, then, does not give a specific solution—it gives a way of dealing with the issue. It is a mirror, showing us how much we still don't know about the universe—and ourselves. And even if intelligent life does exist somewhere else out there, there's another big unknown: timing. The galaxy is billions of years old.

Civilisations might have come and gone long before humans even appeared. Or maybe they'll rise long after we are gone. In a universe this vast, timing could be everything. Two civilisations might pass like ships in the night—never crossing paths or even knowing the other exists. This leads us to the so-called Fermi Paradox, named after physicist Enrico Fermi. The paradox is simple to state: if the universe is so big, so old, and so presumably filled with possibly life-supporting planets, then intelligent life



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should be out there in more than one place. So... where is it? No signals, no spaceships, no detectable reverberations. Just silence.

It is a haunting question, and humans have produced many possible answers over the years. Maybe advanced civilisations always destroy themselves—through war, environmental disaster, or runaway technology. Maybe aliens are deliberately avoiding us, watching quietly from afar. Or maybe they've advanced so far beyond us that we cannot detect them—or maybe they just don't bother to communicate. Others even suggest that we might be in a simulation, and the absence of contact is intentional. That is a more speculative idea, but it testifies to how little we do know. At the opposite end of the spectrum is the Rare Earth Hypothesis, which suggests a different possibility. It agrees that simple life, like bacteria, might be fairly common in the universe. Yet it argues that complex, intelligent life could be extremely rare—a freakish accident of cosmic luck.

Our planet has many peculiar circumstances that make advanced life possible. We have a big moon that locks in the angle and seasons of Earth. We have plate tectonics that recycle nutrients. We have a magnetic field that saves us from harmful solar radiation. And Jupiter acts like a giant cosmic shield, protecting us from asteroid impact. Take all of that into account, and Earth might be far rarer than we ever thought. In which case, the silence is not to be marvelled at after all—it is merely the natural consequence of how rare we really are. So here we are, trapped between two grand ideas. The maths says life ought to be out there. The quiet says it might not be. In the middle lies that very same old question that has kept humanity looking up at the stars for centuries, or are we simply the first to ask—and the first to wonder? When we ask if we are alone in the universe, it's not just a scientific or numerical question—it's a question that carries a lot of religious significance. The thought that we might be the only intelligent beings God has created leads us to consider some of the deepest things about God, salvation, and our presence here.

Christian theology teaches us that God is both omnipotent and perfect. He purposefully and beautifully created the universe, Earth, and everything in it. Psalm 19:1 says, *"The heavens declare the glory of God; the skies proclaim the work of his hands."* If God could create something as complex and life filled as Earth with human beings in His own image, then it is not that inconceivable He might have created life on other worlds too. The universe is unbelievably vast, and it would seem only reasonable that God's creativity would not be focused on this world alone.

Here, though, is where it gets truly fascinating: human beings are made in the image of God (imago Dei). That means that we reflect God's nature and carry on His mission—to share His love and salvation. The Bible teaches that there was one death on the cross, one sacrifice by Jesus that covers all sin and offers redemption to humankind (Hebrews 10:10). So, would other intelligent life forms require salvation? Would Jesus' sacrifice



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be universal to them as well? The Bible does not comment on that, leaves open the door that Earth and humankind are the exclusive focus of God's redemptive endeavour. That there is but one death on the cross is massive. It suggests that the problem of sin—and its resolution—is singular. Jesus' death was not just for human beings but for all of creation as we know it. So, if God had created other intelligent beings that sinned, would they too require Jesus? Or are perfect beings—if such a thing were possible—without sin and therefore without the need of salvation? It is a mystery, for Scripture does not speak one way or the other.

Yet the exclusiveness of Christ's sacrifice implies man's special role. A second hint comes from Revelation 21:1, which speaks of "a new heaven and a new earth." God's ultimate intention is to redeem and remake, and this new creation centres around Earth itself. If other worlds are populated, where are they? Are they part of this new creation? Or is the cosmic drama of sin and redemption associated with Earth only? The story that we have is Earth-centred, and this leads us to realise just how precious this world and humanity are in God's sight. It's also intriguing to think about God's creativity being manifested in the human imagination. That we can even envision other life, and other worlds may be part of how God created us in His image. Imagination and creativity are gifts from God, and maybe this fascination with extraterrestrial life is a reflection of that. Even if there is no other life, the reality that we can envision it shows God's creativity manifested through us. If God is truly omnipotent, nothing prevents Him from creating life wherever he chooses. The question is not so much what God can do, but what God chooses to do. Maybe God focused His redemptive work here with human beings on this earth for reasons we cannot understand. Or maybe other life exists but we are simply unaware of it. In both instances, Scripture calls us to stand in wonder at the mystery and majesty of God's creation. Thinking missionally, if there were intelligent extraterrestrial life forms, it raises tremendous parallels of how Christians would evangelise them. Jesus commanded His disciples to "go and make disciples of all nations" (Matthew 28:19), a mission that has traditionally been for humanity on this planet. What if, though, those "nations" included other worlds? Would God's word need to be translated into completely different languages or methods of communication? This is a reminder of the size of God's kingdom and the limitations of our knowledge. It also serves to highlight how based in human experience our faith is.

Conversely, if there is no other life in the universe, that is significant as well. It indicates God created Earth and man uniquely valuable. The immensity of space then becomes a holy stage upon which man alone stands to carry out God's plans. That does not diminish God's creativity—rather, it enhances it. He fashioned a universe that dazzles but elected to focus His story of redemption here with us. So, this question - are we alone? - urges us to deal with the very heart of Christian faith. It makes us think about God's power, His love for humanity, and the incredible gift of salvation through Jesus' death on the cross (1 Peter 3:18). It beckons us to stand in wonder—not merely of the



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universe's size but of the intimate relationship God beckons each human being to share with Him. Whether or not there's life beyond Earth, what matters most is our response to God's call to be His image bearers and to share His gospel. That mission starts here and now, on this planet that might be uniquely blessed.

Ultimately, whether or not humans are alone in the universe is one of life's greatest mysteries. But to a Christian, the importance of the question has little to do with scientific curiosity—it's a profound spiritual issue. It's a challenge for us to think about the nature of God, the uniqueness of human beings made in His likeness, and the mind-boggling complexity of Christ's death. The Bible teaches us a history about Earth, and man is at the centre of God's redemptive plan. Jesus' death on the cross, once for all (Hebrews 10:10), is telling us of a specific act of love intended for a specific people. That is not to eliminate the possibility of other life but does suggest that, if there is, it has a significantly different role in God's plan—a one we will probably not value here.

Even if there is no other life beyond Earth, the fact that we can imagine it, speaks volumes about God's gift of imagination to us. And if we're not alone, that just adds to the wonder that the Creator of a great and complex universe chose this planet—this small, fragile world—to be the place for His greatest act of love and redemption. It also means that our commission is that much greater. Whether or not we are alone, we have been entrusted with a task: to image God and share God's good news. That's a mission large enough for the entire universe - even if our labour starts here on Earth.

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