



Study Guide

Stars Beneath Us: Finding God in the Evolving Cosmos

Study Guide

This is a five-week study guide to be used with the book *Stars Beneath Us: Finding God in the Evolving Cosmos* by Paul Wallace. This guide is intended for use in the classroom, church small groups, book clubs, and Sunday school classes. Each week includes reading assignments to be completed before the session.

This five-week course covers the major themes of the book and includes suggested online materials, quotes from *Stars Beneath Us*, discussion points, and questions.

Week One: Evolving Cosmos, Obsolete God

Read: Introduction (pp. vii-xiii), Chapters 1 and 2 (pp. 1-32).

Related Media:

- Powers of Ten ([youtube.com/watch?v=0fKBhvDjuy0](https://www.youtube.com/watch?v=0fKBhvDjuy0))
- Cosmic Calendar ([youtube.com/watch?v=IIT41Wuwi8k](https://www.youtube.com/watch?v=IIT41Wuwi8k))
- The Known Universe ([youtube.com/watch?v=17jymDn0W6U](https://www.youtube.com/watch?v=17jymDn0W6U))
- Cat with Diprosopus ([youtube.com/watch?v=dOivbSTpzXs](https://www.youtube.com/watch?v=dOivbSTpzXs))

Questions for Contemplation and Discussion:

- Do you think it's important for Adam and Eve to have been actual people?
- Can you think of a time when your understanding of Christianity was challenged by science?
- Do you think God acts in the world? Has God ever acted in the world for your sake? If so, how do you reconcile this belief with the arbitrariness of human and animal suffering?
- Is it important to you for God to be omnipotent, omniscient, and/or any of the other descriptors found in the block quote on page 19? Why or why not?

Key Takeaways

- Our infinite, evolving, and non-human-centered cosmos challenges the traditional idea of God, which was developed within a finite, static, and human-centered cosmos.
- The arbitrariness of human and animal suffering is not a new problem, but modern science shines a light on it and shows that it's a direct and inevitable consequence of the kind of universe we live in.
- We are not truly separate from the other animals, and this has theological consequences.
- Our clinging to old models of God, developed in the confines of an obsolete cosmos, is one reason that churches in America are in decline.

Key Quotes:

“The thought of life and death spread out over such an unfathomable span of time – without a single human witness – was hard to accept. In the face of this, what was I? What was my life? And the lives of those I loved? Why were we here now, after all of this?” (p. 2)

“The kitten was a victim of cosmic chance.” (p. 10)

“[The idea that we are the ultimate products of evolution] may be the artifact of our self-centeredness and the general optimism of a scientific age.” (p. 11)

“If Christianity is true, there must be some kind of match between its message and the cosmos God has made.” (p. 12)

“Humanity’s vision of the cosmos has changed radically and in every way since Dante penned the Divine Comedy, but [Dante’s God] remains the go-to divine model for Christians everywhere.” (p. 27)

“Christian theology has nothing to do with the particularity and messiness of [our] daily lives. It feels made-up and removed from the world.” (p. 29)

“What are we to do with an obsolete God?” (p. 30)

Week Two: The View from the Ash Heap

Read: Chapters 3 and 4 (pp. 33-62), Job 1-2, 38-42

Related Media:

- Disco Danny (www.youtube.com/watch?v=YWtvvtMgQB8)
- *Just in Case you Ever Wonder* by Max Lucado, as read by Mrs. Sittlow (www.youtube.com/watch?v=gbUPOnWYXPQ)

Questions for Contemplation and Discussion:

- To what extent do you believe the message of Proverbs – *If you do good then you'll get good* – is reliable? Has this message played out in your own life?
- How do you make sense of the wagers between God and the Accuser (Job 1:6-12, 2:1-6)?
- Under what circumstances do you value your experience over Christian tradition? Under what circumstances do you value Christian tradition over your experience?
- What do you do when homeless men and women ask you for money? How do you see your location relative to that person?
- In what ways do you make God in your own image?
- Why does God answer Job's grievances in cosmic terms, referring almost exclusively to the created order? Or, put another way, what do ostriches have to do with justice?
- To what extent, if any, is our innate anthropocentrism justified?

Key Takeaways

- The topic that goes by the name "religion and science" is not simply a matter of solving an intellectual problem or formulating arguments. It is a deeply human issue that is related to all aspects of our lives including suffering, how we treat the marginalized, and our most profound religious impulses and ideas about ourselves and God.
- Biblical perspectives on wisdom are varied. Job stands alongside Proverbs.
- Biblical perspectives on creation are varied. Job 38-41 stands alongside Genesis 1-2 and Psalm 19:1-6.

- Human beings should be less quick to place themselves at the apex of God's creation.
- There is a relationship between the way we treat the marginalized of human society and the marginalized of the living world and even the cosmos.
- The cosmos forces us to rethink our assumption that God is basically a large one of us.
- Our traditions can blind us to what is obvious to others.

Key Quotes

"The underlying equation of Proverbs may be expressed *If A, then A*: If you do good then you'll get good.... The underlying equation of Job is precisely inverted: *If A, then -A*: If you do good you will [suffer]." (p. 37)

"Job is forced to question the tradition that formed him, and the data that drive his questions are of a single type: experience." (p. 44)

"The social system that once buoyed Job looks very different from below." (p. 45)

"Job knows the folly of making God in his own image." (p. 47)

"To be confronted by your own ignorance can be intimidating, especially if you think you really know something." (p. 51)

"The fringe has become the hub, the center is now peripheral. What is marginal to Job is not marginal to God." (p. 55)

"It had always been there, but it took Leviathan to reveal the truth: Job *is* the poor." (p. 60)

Week Three: Two Views of God

Read: Chapters 5 and 6 (pp. 63-94)

Related Media:

- Time magazine cover 11/7/77 (psnt.net/blog/wp-content/uploads/2016/01/homo-habilis.jpg)
- *OneZoom* Tree of Life Explorer (www.onezoom.org/)
- Hillis Plot: A Tree of Life showing 3,000 species (www.zo.utexas.edu/faculty/antisense/DownloadfilesToL.html)
- Ark Encounter and Creation Museum websites (arkencounter.com and creationmuseum.org)

Questions for Contemplation and Discussion:

- Do you see evolution as a threat to traditional theology? To the idea that human beings are made in the Image of God? To the status of the Bible?
- What, in your opinion, motivates Young Earth Creationism? And, whatever your answer may be, do you see any of that same motivation in yourself?
- Have you ever had to unlearn (“unknow”) something that you thought was true? Was it hard or easy?
- How would you describe your God-concept? Can you speculate about how might that concept be different than God? Put another way, how might your God-concept be biased or skewed?

Key Takeaways

- The fear of the cosmos can drive people to believe things that are false and therefore hurtful.
- The book of Job provides a biblical perspective on the cosmos that is in sync with the strangeness and unwholesomeness of evolution. It allows us to encounter the alien and threatening aspects of the cosmos in a light that outshines all fear and trepidation.
- God loves all creatures, not just human beings. God does not share our preoccupation with our own species.
- We must always be conscious of the limits of our ideas, both theological and scientific.

- Encounters with God are not always purely uplifting and emotionally soothing; being made aware of our limits can make us feel powerless and unsettled, if only for a time.
- God will not be contained by our ideas; the closer you get to knowing God the less you understand about God.
- The evolving cosmos has the power to purge us of old and simplistic (and perhaps self-serving) ideas about God.

Key Quotes

“From so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved.” (p. 67)

“Evolution—earthy, inefficient, and patently unwholesome—is inadmissible to one who sees God as fundamentally forthright and plain-dealing.” (p. 76)

“We like to think—even when it hurts us—that things are pretty much about us.” (p. 79)

“One of the lessons of the Gospels is that, if we want to see Jesus, we should look to the margins of human society: the hungry, the imprisoned, the naked, and the weak. Similarly, one of the lessons of the cosmos and the book of Job is that, if we want to glimpse God, we should look to the margins of creation: the remote, the impossibly tiny, the strange, the alien, the inhuman.” (p. 80)

“Conceptual precision is no substitute for openness to the world.” (p. 82)

“Purgation is particularly distressing for those who have a major interest in holding onto what is being purged.” (p. 88)

“Job saw God by seeing the cosmos as God sees it.” (p. 90)

“[The beasts of the wilderness] were no longer gamey and embarrassing and bloody dots on the outer fringes of his consciousness, but peculiar and divinely-made creatures living within their own communities, communities from which human civilization itself appeared distant and alien.” (p. 91)

“Once the cosmos sweeps out his old God-concept, Job can never understand God again.” (p. 92)

“[The science-versus-religion culture war] is ultimately an expression of our own desire to control, that is to say deny, God.” (p. 94)

Week Four: The Holiness of the Everyday

Read: Chapters 7 and 8 (pp. 95-124)

Related Media:

- Neil deGrasse Tyson: We are made of star stuff (www.youtube.com/watch?v=QADMMmU6ab8)

Questions for Contemplation and Discussion:

- Do you believe that God created absolutely everything out of absolutely nothing? (creation *ex nihilo*)? Why or why not?
- Do you agree that “God works with what is at hand, and what is at hand is often chaos” (p. 104)?
- What theological holes (p. 105) are you willing to live with?
- Do you have any experiences that might cause you to question the omnipotence of God?
- How do you understand what it means when it is said that Jesus was “without sin”?

Key Takeaways

- It is important to understand, per Fr. Cavanaugh, why you believe what you believe.
- In classical theism it is hard to see why God should create the cosmos (and us in it).
- It is not enough for a theological idea to make sense; it must also relate in meaningful ways to our lives and the world around us.
- The opening chapters of Genesis do not support the idea of creation *ex nihilo*.
- There is no theological or scientific warrant, apart from tradition, for creation *ex nihilo*.
- The idea of creation from chaos gives us peace in the face of death and the difficulties of life, just as Job’s encounter with Leviathan was a passage into peace and contentment and intimacy with God and neighbor.

Key Quotes

“All true education is intensely personal.” (p. 96)

“What appears terrible and destructive in human eyes is, from the divine point of view, fertile ground. In the hands of God chaos is transformed from a deadly maelstrom into the foundation of a very good creation.” (pp. 99-100)

“There is no reason, outside of tradition, to insist on *ex nihilo*.” (p. 100)

“The ancient idea of creation from chaos should be translated into a new image of creation as gradual, continuous, and open-ended.” (p. 103)

“God is not in absolute control of all things.” (p. 104)

“The hovercraft version of Jesus’ humanity, in other words, is incidental, not essential, to his identity.” (p. 115)

“In an evolving cosmos, Jesus evolves.” (p. 117)

“[Jesus] challenges our insistence on separating humanity and divinity, just as science challenged our insistence on separating the earth—indeed, our very flesh and bones—from the heavens.” (p. 123)

“We have made Jesus more than we can possibly be so we don’t have to become who we can possibly be.” (p. 123)

Week 5: Looking Out, Looking Back

Read: Chapters 9 and 10 (pp. 125-153)

Related Media:

- Trailer for *The Principle* (www.youtube.com/watch?v=p8cBvMCucTg)
- Short documentary about exoplanets. It's a couple years old but gives a good quick look into some methods used to detect such planets (www.youtube.com/watch?v=0WatNUka7OA)
- Nice discussion of the Fermi Paradox ("Where is everybody?" from p. 138): (www.youtube.com/watch?v=sNhhvQGsMEc)

Questions for Contemplation and Discussion:

- Reflect on the Whirlwind Principle: "The human species is not a central, specially favored species in the cosmos" (p. 127). In what ways, if any, does it contradict Christianity? Your personal faith?
- What would your reaction be to the discovery of extraterrestrial intelligence? How would such a discovery shape your understanding of God? Of human beings?
- What do we human beings have at stake when we insist on being special in the cosmos?
- What do you make of the strange denouement in Job 42, described at the top of p. 145? Why does Job get everything back again? What does it suggest about the principle of reward and punishment, and about human suffering?
- What "in addition to's" (p. 147) might keep you from doing the work and living the life you are called to do?
- Has your faith (or a specific encounter with God) ever caused you or anyone you know to ignore social conventions?

Key Takeaways

- Both the evolving cosmos and the book of Job question humanity's assumption that we occupy the center of God's attention.

- Just as Job spent years only faintly aware of life outside of human society, we spend most of our time concerned with ourselves, only vaguely conscious of the wilderness beyond our home planet.
- Within the Milky Way galaxy alone there are certainly millions of Earth-like planets within the habitable zones of their stars, but this may not be sufficient for life to appear on any of them.
- Human beings are without a doubt the strangest feature of the cosmos as we know it, but how well do we know it?
- Job has been enlightened by his tour of the cosmos, and no longer worries about the relative importance of human beings; God's love is sufficient for all creatures.
- God and the cosmos have ensured that Job also no longer worries about how he stacks up against his fellow humans. He no longer is concerned to keep score or to do things for the sake of mere convention. He has lost his sense of separation from others.
- Job's encounter with the cosmos has destroyed his old self-centered concept of God, and he is not concerned that he no longer understands God.

Key Quotes

"If the Whirlwind Principle is correct, then we not only share our planet with a spectacular host of God's creatures, we also share the cosmos with God's ET's." (p. 131)

"There are billions of Earth-like planets in the Milky Way alone, not to mention the whole of the cosmos." (p. 133)

"There are *amazingly* few recipes in the cosmic cookbook in which life is permitted." (p. 134)

"There is an awful lot of *out there* out there." (p. 137)

"The silence gets louder every day." (p. 138)

"Whether the ETs are here or there, well, that's neither here nor there." (p. 139)

"The enlightened mind is not distracted. While chopping wood, there is only wood. While carrying water, there is only water." (p. 146)

"Unchecked, the idea that you're especially distinguished can grow to the point that God is cast in the image of the creature." (p. 150)

"before revelation: judge wisely, care for the poor. After revelation: judge wisely, care for the poor." (p. 151)