

# Study Guide for Video "A Summary of the Evidence for Intelligent Design"

Here are video recordings of a five-week class taught by Dr. Sewell in Summer 2023 using this video and study guide.

## 1. The Fine-tuning of Conditions on Earth

It is well known, and well accepted in scientific circles, that the conditions on our planet are extremely fine-tuned for life: the Earth is just the right size, it is just the right distance from the sun, our sun is the right type of star, our atmosphere has many rare and lucky features---the list goes on and on.

Of course, materialists have a plausible explanation for this: there are many planets in the universe but only a very few are suitable for life, and we are here because our Earth is one of those rare planets.

At least it would be a plausible explanation if the materialists' assumptions were plausible, that once you have a planet where conditions are just right there is a reasonable chance that life would spontaneously arise and intelligent beings would spontaneously evolve over time. But we will see that these assumptions are not plausible.

Although the evidence for design from this "local" fine-tuning is not nearly as strong as the evidence from the "global" fine-tuning discussed in the next section, there is some evidence that our planet *might* be the only "habitable" (for complex life at least) planet in our galaxy. At least, habitable planets are exceedingly rare, despite all the talk about "Earth-like" planets in the popular media.

### Discussion Questions

- Watch Astronomer Guillermo Gonzalez's video *The Privileged Planet* (<https://youtu.be/QmIc42oRjm8>) (17:20-26:45) and/or Episode 4 of the Discovery Institute's *Science Uprising* video series, <https://youtu.be/WR51OrawqIg> (2:40+) and list some of the rare and special features of Earth that make our planet hospitable for life.

## 2. The Fine-tuning of the Physical Laws of our Universe

It is also widely accepted that not only is our Earth an ideal planet for life to thrive, but our whole universe is fine-tuned for life. The smallest changes in most of the basic constants of physics (the gravitational constant, Planck's constant, the charge and mass of the electron, and so forth) or of the initial conditions at the Big Bang, would have led to a universe where no conceivable form of life could have arisen.

Steven Hawking, in *A Brief History of Time* writes, "The remarkable fact is that the values of these numbers seem to have been very finely adjusted to make possible the development of life."

How do materialists explain this? There must be many universes, with many different laws and constants and initial conditions, and we are here because our universe is one of those rare universes where the conditions are just right for us to be here.

A.J. Leggett lists some of the fine-tuned properties of our universe in *The Problems of Physics*, and concludes

"The list could be multiplied endlessly, and it is easy to draw the conclusion that for any kind of conscious beings to exist at all, the basic constants of Nature have to be exactly what they are, or at least extremely close to it. The anthropic principle then turns this statement around and says, in

effect, that the reason the fundamental constants have the values that they do is because otherwise we would not be here to wonder about them."

Paul Davies, in *Other Worlds*, writes

"If we believe there are countless other universes, either in space or time, or in superspace, there is no longer anything astounding about the enormous degree of cosmic organization that we observe. We have selected it by our very existence.... The many universes theory does provide an explanation for why many things around us are the way they are. Just as we can explain why we are living on a planet near a stable star by pointing out that only in such locations can life form, so we can perhaps explain many of the more general features of the universe by this anthropic selection process."

This time there is no evidence---there can never be any evidence---that there are other universes out there, with the same laws of physics but random values for the basic constants (or perhaps random laws of physics also??), so the explanation that our universe is just right because otherwise we would not be here to wonder about it is completely unscientific.

It is interesting that those who for many years have ridiculed religious believers for imagining that there is another universe, another dimension, out there with better conditions awaiting us have now been reduced, by the evidence for fine-tuning, to inventing not one but "countless" other universes with different conditions.

#### Discussion Questions

A. Watch the video *The Fine Tuning of the Universe*, <https://youtu.be/EE76nwimuT0> and list some of the constants of physics that are extremely fine-tuned to make our universe hospitable for life. *The Privileged Planet* (<https://youtu.be/QmIc42oRjm8>) (48:13-50:25) also has some details on this fine tuning.

B. Do you think most scientists really find the "multiverse" explanation satisfactory, or it is just a last-ditch, desperate attempt to avoid the obvious conclusion? (If it is really satisfactory, why not just invent enough universes so that civilizations could appear in one of them by pure chance, why bother appealing to natural selection?) To appreciate how determined some scientists are to avoid the conclusion of design, watch the discussion on fine tuning with Nobel prize winner Roger Penrose and William Lane Craig (<https://youtu.be/OBAbjE-WOJo>) (0:00-6:55).

C. Fred Heeren, in *Show Me God* illustrates the silliness of the idea that, given enough universes, everything will eventually happen. If there are enough universes, he says, one of them would be just like ours except that in that one Elvis Presley kicked his drug habit, got involved in Tennessee politics, and became president of the United States. Imagine some other strange or funny things that we might be able to explain using the "multiverse."

#### **2b. Fine-tuning for a "Lush" World**

By the way, a number of scientists, for example biochemist Michael Denton (in his 2016 book *Fire-Maker*), and physicist Robin Collins (in a chapter of a 2018 Oxford University Press book, "The Argument from Physical Constants: the Fine-tuning for Discoverability") are now showing us that the conditions on Earth, and the laws of physics, are not only fine-tuned for the survival of intelligent beings, they are also fine-tuned for the development of technology and for scientific discovery.

Astronomer Guillermo Gonzalez in his book *The Privileged Planet* has shown that the Earth is not only well designed for human survival, it is also ideally situated for viewing the rest of the universe. These fine-tunings are interesting because they cannot be explained by "the conditions were just right because otherwise we would not be here to wonder about it" arguments.

We would still be here to wonder if the conditions on Earth, and the properties of the chemical elements and compounds, were not so finely-tuned to make possible the development of technology and scientific discovery. The only explanation for these fine-tunings is they are gifts from our designer, to challenge and entertain us.

Biochemist Michael Behe, in *The Edge of Evolution* (Free Press, 2007) writes:

Suppose in a large room were gathered everyone who had won a prize in the past year in the Powerball lottery, no matter how large or small. They were all having a party, closed to the public. You...sneak into the guarded room and meet someone at random. What are the odds that the first person you meet is a big-money winner? Very slim. The great majority of folks there will be minimum or small prize winners. That is, a person selected at random from the "winners" category very likely will fulfill just the minimum requirements for getting into the room.

The same goes for universes. On the finite random multiverse view, we should very likely live in a bare-bones world, with little or nothing in life beyond what's absolutely required to produce intelligent observers. So if we find ourselves in a world lavished with extras---with much more than the minimum---we should bet heavily against our world being the result of a finite multiverse scenario...It is difficult to make a rigorous argument on such a question. Yet it seems that our world is quite lush and contains much more than what's absolutely needed for intelligence.

As Behe says, it seems obvious that our world is much more "lush" than the anthropic principle would be expected to produce, but it is "difficult to make a rigorous argument" on this question. But this is exactly what a small number of scientists are now doing.

#### Discussion Questions

A. List some features of the laws of Nature which make our lives more comfortable or interesting or challenging, that do not seem to be strictly necessary for intelligent observers to exist in our universe.

B. The above point can equally well be used to counter the materialists' explanation for why our Earth is so well-suited for life. List some properties of our Earth which make our lives more comfortable or interesting, which do not seem to be strictly necessary for intelligent observers to exist on our planet.

Biochemist Michael Denton's video *Fire Maker* (<https://youtu.be/an98jVCyApo>) (2:00-8:40, 14:50-20:00) and Astronomer Guillermo Gonzalez's video *The Privileged Planet* (<https://youtu.be/QmIc42oRjm8>) (33:03-48:15) may provide some answers for (A) and (B). See also the Robin Collins [chapter](#), and [Electronic Technology Shows Foresight in Nature](#) by Eric Hedin.

### 3. The Origin of Life

It is often claimed that science is close to understanding how the first simple life form arose through entirely natural processes. To see how baseless this claim is, you only have to realize that with all our advanced technology we are still not close to designing any type of self-replicating machine, that is still pure science fiction.

So how could we imagine that such a machine could have arisen by pure chance, even given a universe with fine-tuned laws and a planet with fine-tuned conditions? When we add technology to such a machine, to move toward the goal of reproduction, we only move the goal posts, as now we have a more complicated machine to reproduce.

Maybe someday human engineers will design a self-replicating machine, like we see everywhere in the living world, but it will not happen in my lifetime, and it will not be simple. And it will certainly not show that such a machine could have arisen without design.

To understand why self-replicating machines are so far beyond current human technology, let's start with something simple. Let's take an empty cardboard box and build a completely automated factory inside which can produce empty cardboard boxes. The factory would, I presume, at least need to have some metal parts to cut and fold the cardboard and a motor with a battery to power these parts. But since the box now only builds empty boxes, it is not a self-replicator. So we would need to add another factory that could automatically produce a box with an empty-box building factory inside, and that factory would be enormously more complicated. But this box is still not a self-replicator because the box it builds can only build empty boxes, so now we need to add more technology so that our factory can produce a box that builds empty-box building factories, and then.... All of this ignores, of course, the very difficult question of where the box gets the raw materials needed to supply its factories.

#### Discussion Questions

A. The above discussion makes us wonder if it is even theoretically possible to design any self-replicating machine, yet such machines exist everywhere in the living world. Do you think human engineers might someday design a self-replicating machine?

B. What are the chances then of such a machine arising by pure chance, even given a planet with fine-tuned conditions, and a universe with fine-tuned laws? See Rice University chemist James Tour in Episode 5 of *Science Uprising* (<https://youtu.be/Ymjlrw6GmKU>) (0:40+).

C. The video *Why Evolution is Different* (<https://youtu.be/NEyFUB7vtJw>) (19:37-21:30) invites us to imagine that human engineers *were* able to design cars with car building factories inside, with the ability to build new cars with car building factories inside *them*. If we left these cars alone to reproduce themselves, generation after generation, there would inevitably be duplication errors from time to time. Do you think there is *any* chance that natural selection could organize these duplication errors into more advanced “species”, or would it eventually lead to the extinction of the species? We really don't understand how living species are able to pass their current complex structures on, generation after generation, much less how they evolve even more complex structures.

#### 4. The Origin of Intelligent Humans

Materialists believe they already understand how the first living things evolved into intelligent beings, but they really do not have a clue. To appreciate this, you only have to realize that what they are forced to believe is that the four fundamental, unintelligent, forces of physics alone could have rearranged the basic particles of physics on Earth into tall buildings, computers and cell phones, and airplanes and the Internet, as my new video *Why Evolution is Different* brings out. The laws of physics are very cleverly designed, and probably can explain everything that has happened on other planets, but they are obviously not clever enough to explain, by themselves, the development of computers and cars and Apple iPhones.

The prevailing view in science today is that physics explains all of chemistry, chemistry explains all of biology, and biology completely explains the human mind; thus physics alone explains the human mind and all it does. One physics text says “One of the most remarkable simplifications in physics is that only four distinct forces account for all known phenomena.” This is what you have to believe to *not* believe in intelligent design, that the origin and evolution of life, and the evolution of human consciousness and intelligence, are due entirely to a few unintelligent forces of physics. Thus you must believe that a few unintelligent forces of physics alone could have rearranged the fundamental particles of physics into computers and science texts and jet airplanes.

The first part of the video *Why Evolution is Different*, (<https://youtu.be/NEyFUB7vtJw>) (0:00-14:06) focuses on this simple but powerful argument for intelligent design and against materialism. The video imagines that someone proposes a theory as to how certain rare types of tornados, under just the right conditions, could turn rubble into houses and cars. Would we need to understand the scientific details of his theory before rejecting it? What if his theory were supported by the top meteorologists of the world, would we take it seriously then?

## Discussion Questions

A. Many scientists believe they can explain how four fundamental forces of physics could rearrange the basic particles of physics into computers, science texts, airplanes and Apple iPhones. Can you think of any reason why such a theory should be taken more seriously than the hypothetical theory as to how constructive tornados might work? Do you really need to hear the details of their theory, or know how many Nobel prize winners support it, before deciding if you believe it? And see [this article](#) on how Darwin's theory is losing credibility, even among evolutionary biologists.

B. In your answer to (A) you might have said, one difference is, we have never seen a tornado turn rubble into houses and cars, but we know that civilizations did actually arise from a barren Earth over millions of years. But then you are just insisting that we accept the materialists' assumption that if something happens, it *has* to be explainable by unintelligent causes. What if we *did* see a tornado turning rubble into houses and cars? Do you think most scientists would simply start working on a scientific theory to explain constructive tornados, or acknowledge that a miracle had happened?

C. What cause do we know of that *can* turn rubble into houses and cars? How do cities recover from tornado damage?

### 4b. The Similarities Between Species

This video also points out how similar the fossil record is to the development of human technology, with obvious similarities between each new invention and previous designs, but with large gaps where major new features appear, for the same reasons: gradual development of the new organs that gave rise to new orders, classes and phyla would require the development of new but not yet useful features. So Darwinism could not explain the development of these new features even if they did occur gradually---and they don't.

In many people's minds, the similarities between species in the fossil and living records is the strongest argument against intelligent design. "This just doesn't look like the way God would have created things" is the argument, an argument frequently used by Darwin himself in *Origin of Species*. But the second part of the video *Why Evolution is Different* (<https://youtu.be/NEyFUB7vtJw>) (14:05+) shows how similar the fossil record is to the history of the development of human technology. (Harvard paleontologist George Gaylord Simpson says "Gaps among known orders, classes and phyla are systematic and almost always large." Also see [this article](#)---the "tree of life" doesn't really look so much like a tree now.)

So if the development of life looks like the way humans, the only other known intelligent beings in the universe, design things, through careful planning, testing and improvements, why should that be taken as an argument *against* intelligent design?

Nevertheless, some Christians do not like the picture of a God who needed millions of years, and had to create through testing and improvements, like we do (though his creations are infinitely more complex than ours). But it could be argued that not only is this picture more consistent with the scientific evidence than the picture of a God who can create anything by snapping his fingers or waving a magic wand, without having to get involved in the details, it is perhaps also more consistent with the Genesis 1 account of Creation. Genesis 1 says, on the fourth day, "God made two great lights---the greater light to govern the day and the lesser light to govern the night." If the sun was not created until the 4th day, it is obvious that the first three "days" were not meant to be understood as days as we know them, so they could represent vast expanses of time. And after each step, God "saw that it was good" and proceeded to improve on his creation the next step. At the end God "rested from all the work of creating that he had done." Is snapping one's fingers or waving a magic wand "work"?

By the way, the Genesis story correctly states that the universe had a definite beginning, that the sun, moon and stars were created before animals, and the sea creatures before land animals, and man was created last. Of course we know that the Genesis story is not a scientifically accurate account of origins, but geneticist W.E.Lönnig (in the German TV interview discussed in section 6) says "my personal opinion [is] that the Bible ... was much closer to the truth than the current story of chance."

But if you still don't like the picture of a God who creates like we do, step-by-step, there may be another possible explanation. In my Discovery Institute Press book *In the Beginning and Other Essays on Intelligent Design*, I conclude the Epilogue "Is God Really Good?":

Why does God remain backstage, hidden from view, working behind the scenes while we act out our parts in the human drama? This question has lurked just below the surface throughout much of this book, and now perhaps we finally have an answer. If He were to walk out onto the stage, and take on a more direct and visible role, I suppose He could clean up our act, and rid the world of pain and evil---and doubt. But our human drama would be turned into a divine puppet show, and it would cost us some of our greatest blessings: the regularity of natural law which makes our achievements meaningful; the free will which makes us more interesting than robots; the love which we can receive from and give to others; and even the opportunity to grow and develop through suffering. I must confess that I still often wonder if the blessings are worth the terrible price, but God has chosen to create a world where both good and evil can flourish, rather than one where neither can exist. He has chosen to create a world of greatness and infamy, of love and hatred, and of joy and pain, rather than one of mindless robots or unfeeling puppets.

#### Discussion Questions

A. Why do you think God seems to have created step-by-step (though not really gradually: in fact new organs and new systems of organs do seem to appear suddenly!) over millions of years, rather than creating everything in seven real days? Is it because he has to create this way, for the same reasons we do, or because a 7-day creation would have *forced* everyone to be aware of his presence? Can you think of some blessings that we might lose if God *were* to take on a more direct and visible role in our world? (Hint: read the rest of the essay "Is God Really Good?") In the end, why God does anything the way He does is a mystery, and maybe it is intended to be a mystery.

B. If God designed new plants and animals by just speaking a command, without actually getting involved in the details of the design---who then *did* get involved in the details? *Someone* has to take care of the details of design---don't they?

C. Paul says "God chose the foolish things in the world to shame the wise." Could this possibly be relevant to question (A), and if so, how?

### **5. The Origin of Human Consciousness**

Here is a picture of three children in the 1950's. One of them is me, the other two are not. I saw the world from inside one of these children. I saw every picture that entered through his eyes, I heard every sound that entered through his ears, and when he fell on the sidewalk, I felt his pain.

How did I end up inside one of these children? This is a question that rarely seems to trouble evolutionists. They talk about human evolution as if they were outside observers and never seem to wonder how they got inside one of the animals they are studying. They consider that human brains are just complicated computers, and so to explain how we got here they just have to explain how these mechanical brains evolved.

But even if they could explain how animals with mechanical brains evolved out of the primeval slime, that would leave the most important question---the one evolutionists never seem to even wonder about---still unsolved: How did I get inside one of these animals?

#### Discussion Questions

A. If you believe that humans are the result of a purely mechanical process such as natural selection of random mutations, you are forced to believe we are just machines. Do you believe you are just a machine?

B. Some scientists say that if a computer is able to pass a "Turing test" and convince humans communicating with it that they are communicating with another human, then this computer has to be considered able to "think," just like humans. Suppose you send a text message "My mother died last week" to two numbers, but one is read by a computer, the other by a human friend. Both text back "I am saddened by the death of your mother." Is it possible that the computer is really saddened by the death of your mother, or is it just programmed to respond to the words "mother" and "died?" What about the human, same question?

C. Materialists believe that human brains are just complicated computers, and computers *always* do exactly what they are programmed to do, nothing more or less. Thus they do not believe humans really have any free will, we also do exactly what we are programmed by Nature to do. Certainly our actions are *influenced* by our heredity and environment (for example: people with an X and a Y chromosome are more likely to be violent than people with two X's!), but discuss the implications for our legal system, and for society in general, if we all really believed that humans have no free will, no control at all over our own actions.

D. The idea that humans have absolutely no free will leads to some bizarre conclusions. University of Chicago scientist Jerry Coyne is trying to convince everyone that humans have no free will, and that our justice system should take this into account. So I decided to write him an e-mail saying "If no one has any free will, then everything, including whether or not society accepts your ideas on justice, was determined long ago by the initial conditions at the Big Bang, so why work so hard trying to convince people, just sit back and see what they do." But then I thought, maybe there's no point in trying to convince him that this is pointless, because whether or not he will keep trying was also determined a long time ago. On further reflection, I decided I'd just sit back and see if I wrote him or not! Think of some other bizarre conclusions that a denial of free will might force us to accept.

E. Of course if there is no free will, there is no right and wrong. Do you think atheists *really* believe they have no control at all over what they do, or that there is really no right and wrong? Have you ever heard atheists make moral judgments?

## 6. The Beginning of Time

For thousands of years, nearly everyone in every corner of the world looked at plants and animals and said, these things are obviously designed, I wonder who designed them? Only the modern scientist, over-confident from so much success in unraveling other mysteries, says, "these things sure look like they were designed, and the deeper we dig the more designed they look, but who designed the designer? Nothing can possibly be beyond the reach of our science, so if we can't explain where the designer came from, he can't exist."

For many years materialists avoided the parallel question of "who designed matter and energy" by saying they have always existed, but in the last century it was discovered that matter and energy and space and time did begin suddenly, with a "Big Bang," about 14 billion years ago.

What came before the Big Bang? Even if "before" the beginning of time as we know it is not meaningful in a temporal sense, it is still meaningful in a causal sense, because out of nothing comes nothing: there has to be some "first cause."

Whether this first cause is intelligent or unintelligent, there is by definition no hope of ever explaining it in terms of "earlier" causes. Materialists can say that their currently preferred universe-generating mechanism needs no explanation because it is eternal, but we can equally say our designer needs no explanation because he is eternal.

So why not assume a first cause that can explain what was caused: a well-designed universe with physical laws that are extremely fine-tuned for the magnificently designed plants and animals, and intelligent, conscious humans, that arose on our magnificent Earth?

In a German TV interview (<https://youtu.be/9HxcaXDWELE>) (8:57-12:15; turn on English subtitles) W.E.Lönnig, for 25 years a research scientist at the *Max Planck Institute for Plant Breeding Research* in Cologne, answers the interviewer's question "who designed the designer?"

Yes, you are totally right, this is a standard objection which is used by leading Darwinists. In one of the recent bestsellers [by Dawkins] this was the main argument: we cannot accept this, because we would only have an explanation which in turn requires an even more complex explanation.

I would like to answer as follows: materialists have believed for more than two thousand years that the universe is of infinite age and has no designer and no beginning. Only in the twentieth century and especially in the break-through of the sixties it became clear that the universe had a beginning. Since Aristotle, since more than two thousand years ago it has been said that the universe is of infinite age and had no beginning.

If this line of thinking was possible, then why it is now not possible to say that if a designer exists, maybe he also had no beginning. If it was possible to believe for two thousand years that the universe had no beginning, why it is impossible to state a hypothesis that the designer had no beginning as well?

This is of course what the Bible says: God is without beginning, from everlasting to everlasting, without beginning and without end. And exactly this point "from everlasting to everlasting" has been applied for two thousand years to matter. Why can't we apply this eternity to God?

A little later Lönnig adds:

There are different questions. If I have a Boeing, or a jet aircraft, whatever, and I ask "who has built this machine" then the answer is "an engineer," "a team of engineers". But some may ask "what is the origin of the engineers? Therefore I don't believe that this machine has been designed." We need to separate these two questions: Are there any clues from the structure of matter that suggest intelligent design? After that we can ask another question: What is the origin of the designer? It is possible to reason regarding intelligent design without asking about the origin of the designer. That is certainly a possible and legitimate question, but it does not change the reasoning, when there is a complex specific irreducible system I can draw conclusions regarding a designer from that, but I can still leave open the other question.

#### Discussion Questions

A. Watch Episode 7 of *Science Uprising* (<https://youtu.be/m82PmE6oASo>), about the Big Bang theory, and *The Privileged Planet* (<https://youtu.be/QmIc42oRjm8>) (1:08:25-1:13:45).

B. Give examples (from archaeological excavations, crime scenes, SETI, etc.) where we routinely decide if there is design present before we know anything about the designer.

C. Some may say, but it is much easier to understand how matter and energy could be eternal, than an intelligent designer. But is it really? If it is *impossible* for us to explain any first cause, can one first cause be more impossible for us to understand than others?

#### Other resources:

My review of Stephen Meyer's 2021 book [Return of the God Hypothesis](#)

Illustra Media films: [Metamorphosis](#), [Flight](#), [Living Waters](#)

My 2015 *Discovery Institute Press* book [In the Beginning and Other Essays on Intelligent Design](#)