"Since the creation of the world God's invisible qualities – his eternal power and divine nature – have been clearly seen, being understood from what has been made, so that men are without excuse." – Romans 1:20
Evidence of God

In Cosmos
Evidence from Inanimate Nature

The universe provides strong evidence for the existence of a God like the One pictured in the Bible.

We examine two lines of evidence here:

- Evidence the universe had a beginning
- Evidence the universe is designed
A Beginning

- Atheists must either claim that the universe has always existed or that it popped into existence without a cause.
- The history of cosmology in the past century argues strongly that the universe had a beginning.
Cosmology in the 20th Century

- Static, eternal universe model
  - But discovery of expanding universe
- Steady-state universe model
  - But discovery of early high temperature
- Oscillating big-bang model
  - Discovery of acceleration, insufficient density
- Big-bang bubble models
  - No evidence for more than one universe
As Hugh Ross has pointed out, the history of cosmology in the 20th century has been an ever more frantic attempt to escape a universe with a beginning in the face of mounting evidence.

As far as we can tell from the inside, the universe has not always existed, but began at a finite time in the past.
A Beginning!

- Claims that our universe is a bubble in a larger universe are more of a leap in the dark than claims the universe was created by God.
- Claims that our universe just popped into existence without a cause are truly desperate. Science itself (& personal experience) is based on the belief in causation.
A Designed Universe

- Atheists have no mind in the universe to produce design until the universe has evolved minds.
- They must therefore argue that all apparent design is not really design but a clever (& accidental!) fake.
- But the universe looks designed in ways that are far from trivial.
The Basic Forces

There are four known basic forces that constitute the physics of our universe.

- Strong nuclear force
- Electromagnetism
- Weak nuclear force
- Gravity

These forces differ drastically in strength, yet they are very closely adjusted to allow life to exist.
**Strong Force**

- The strong force holds both neutrons & protons together to form the nucleus.
- If this force were 5% weaker
  - Deuterium would be unstable
  - Stars would not burn
- If this force were 5% stronger
  - The diproton would be stable
  - Stars would burn explosively
Weak Force

- The weak force holds the neutron together.
  - If it were a few % weaker
    - Neutron would be unstable
    - No heavy elements
  - If it were a few % stronger
    - Neutron would be too stable
    - No hydrogen
Electromagnetic Force

- The e-m force holds electrons to atoms, and atoms to one another, allowing neutral atoms, molecules & solids.
- This force depends on the balance of + and – charges to both attract & repel.
- If this balance were off by 1 part in $10^{40}$, this force would swamp gravity and there would be no galaxies, stars, planets or people.
Gravity

- Gravity is the weakest of the four forces, but it dominates at astronomical distances.
- Gravity & the expansion of the universe are neatly balanced to produce a life-friendly universe.
- If the balance were off by 1 part in $10^{60}$, the universe would expand too quickly or collapse too quickly to form stars, planets or people.
The universe is "fine-tuned" to allow life at the level of less than 1 part in $10^{100}$.

In an atheistic scheme, this means we need at least $10^{100}$ universes to expect this by chance.

If you wish to bet there is no God at these odds, you will have no one to blame but yourself if you are wrong.
Evidence of God

In Conscience
Evidence from Animate Nature & Humanity

- High level of order in living things
- "Initiative" in humans & higher animals
- Level of intellect in humans
- Structure of rationality in nature
- Human moral standards
- Human pleasure
- Human futility
"The information content of a simple cell is about $10^{12}$ bits, equivalent to about 100 million pages of the *Encyclopaedia Britannica.*" – Carl Sagan, article "Life" in the *EB.*
High Level of Order

- Sagan's statement is just for the simple bacterium *E. coli*.
- Multi-celled animals, especially humans, are far more complex than this.
- All the evidence we have suggests that the universe is incapable of producing this level of order by natural processes.
Humans & (at least) the higher animals apparently have the ability to initiate actions that are not caused by any external necessity.

One of the goals of AI (artificial intelligence) research is to show that this can be produced by purely natural causes in a mindless universe.

We should not mistake research goals for research results.
The level of intellect in humans appears to be far beyond what is "needed" in primitive conditions or even in most situations today.

This does not fit what one would expect from evolution:
- Too much energy put into unneeded brain power takes away from what is needed to be a better competitor.

This suggests mankind was designed for some purpose that requires considerably greater intellect than we now use.
Structure of Rationality

"The most incomprehensible thing about the universe is its comprehensibility."

– Albert Einstein
Human logic appears well-designed to explain the universe.

It can deal with all sorts of things we can never imagine it having contact with during its supposed evolution:

- Mathematics
- Atomic structure
- Poetry
Einstein was amazed that man's mind (developed by mutation) should have categories to handle all this.

But a God might very well have designed the human mind to function well in the universe he made.

Atheists have only mutation and natural selection to explain all this.
Moral Standards

- Philosophically, we cannot derive an "ought" from an "is." Where does this realm of human activity come from?
- The world’s cultures contain strangely parallel moral standards.
- This argues against independent development of morality and for a common source.
Moral Standards

In order to determine if there is any universal moral law beyond human convention, I have devised the following test.

I will throw this water balloon at Susie Derkins unless I receive some sign within the next 30 seconds that this is wrong.

It is in the universe's power to stop me. I'll accept any remarkable physical happenstance as a sign that I shouldn't do this.

Ready?... Go!

Tum Tum Doo Doo
Moral Standards

READY?... GO!
TUM TE TUM DOO DOO

... NOTHING’S HAPPENING... FIVE SECONDS TO GO!

TIME’S UP! THAT PROVES IT! THERE’S NO MORAL LAW!
WHEEE! HA HA!
Moral Standards
WHY DOES THE UNIVERSE ALWAYS GIVE YOU THE SIGN AFTER YOU DO IT??
Is all pleasure really biologically useful?

Loren Wilkinson suggests that the strength and variety of human pleasures is far beyond what can be explained by biological utility.

See Wilkinson, "The Problem of Pleasure" in Montgomery, Christianity for the Tough-Minded.
Futility

Humans have a sense of longing and a joy that does not seem to have any object in this world.

Man appears to be a sort of ruin:
- Not just junk, like unshaped stones
- Not functioning as he appears to be designed to

This "frustrated design" is hard to explain by evolution, since there is no apparent reason for desires which transcend the present order.
Evidence of God in Conscience

These items fit well with a God behind it all, especially the God of the Bible.

- High level of order in living things
- "Initiative" in humans & higher animals
- Level of intellect in humans
- Structure of rationality in nature
- Human moral standards
- Human pleasure
- Human futility
"Since the creation of the world God’s invisible qualities – his eternal power and divine nature – have been clearly seen, being understood from what has been made, so that men are without excuse." – Romans 1:20
The End

Of This Talk
The Rest is Up to You