

Finding God in Science

Part 2: Building Blocks

Sarah McGee, Ph.D.

Ph.D. University of Colorado 2012
M.S. University of Colorado 2000
B.S.E. University of Michigan 1998

Sarah@JesusReignsEternal.org

Creation Reveals the Creator

- Science is the study of what has been created
- Rom 1:20

For 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.

Consistency

- Science is trying to methodically determine the laws that govern the universe
- These laws reveal the character of the One who made them.
- God made both the physical realm and the spiritual realm, so they must be consistent

Trying to Explain the Universe

- "Classical Mechanics" explains what can be seen with the naked eye (The physical realm)
- There is a lot more to the universe than what can be seen with the naked eye
- That is where Quantum Mechanics comes in

Classical Mechanics

- These rules only apply to 3+1 dimensional space-time (the physical realm) and things that aren't too small or moving too fast
- Newton's Laws:
 - Action-Reaction – things bounce back
 - Inertia – things are hard to move or stop
 - Gravity – things fall
- Based on "Intuition"

Quantum Mechanics

- Quantum Mechanics deals with the boundary between the physical and the non-physical.
- These are rules that you can't figure out with your eyes.
- Therefore the rules of Quantum Mechanics can seem counter-intuitive, which is also the case with much of the Bible.
- The Bible refers to the non-physical realm as the spiritual realm.

God's Covenant

- Jeremiah 33:25

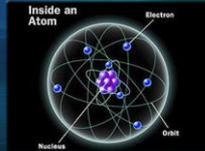
This is what the Lord says: 'If I have not **established my covenant with day and night and the fixed laws of heaven and earth**, then I will reject the descendants of Jacob and David my servant and will not choose one of his sons to rule over the descendants of Abraham, Isaac and Jacob. For I will restore their fortunes and have compassion on them.'

God's Covenant

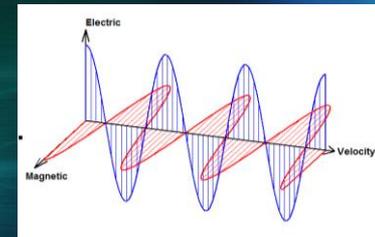
- God will not violate his covenant with the laws of nature
- But He does frequently manipulate them
- God has given us dominion over nature (Psalm 8, etc.)
- We need to know what the laws are and how they relate to the spiritual realm

The Smallest Things

- Atoms ($1 \times 10^{-10} \text{m}$) are made out of
 - Electrons
 - Protons
 - One down, two up quarks
 - Neutrons
 - One up, two down quarks
- Light is made up of photons
- So everything in the universe is made out of quantum particles like electrons, quarks, and photons.

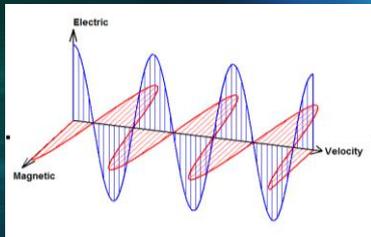


What are the Particles made of?



- Quantum particles are made out of “plane waves”
- These plane waves move in one direction and have constant amplitude

What are the Particles made of?



- Like electromagnetic waves, etc.
- So everything in the universe is made out of these waves

Dual Nature

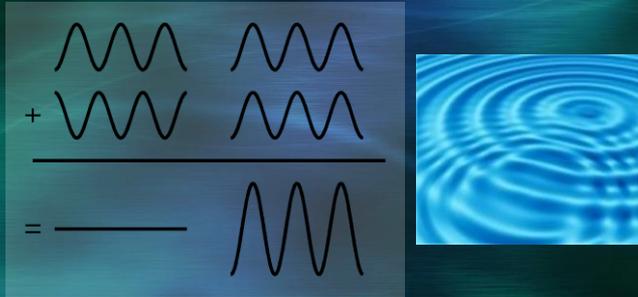
- These little balls are really made up of waves



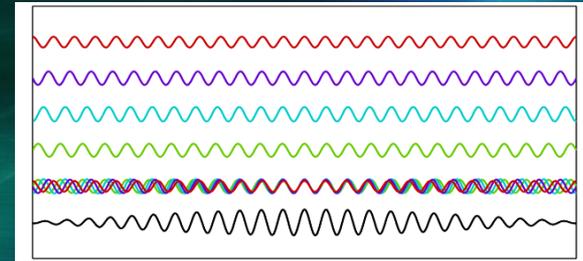
- This “paradox” is called “**Wave-Particle Duality**”

Everything has a confined nature and a spread out nature at the same time.

Wave Addition

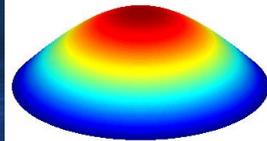
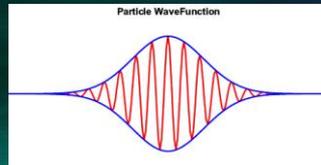


Wave Interference



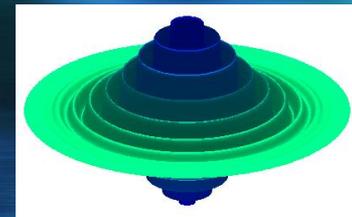
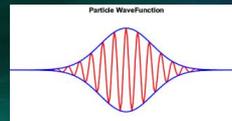
Interference adds the plane waves up like ripples in a pond

Wave Interference



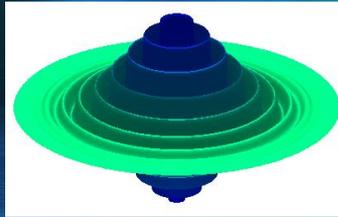
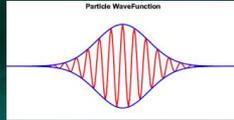
Interference adds the plane waves up like ripples in a pond

A Wave Packet



- The waves add up to make a localized packet of waves
- To the observer this tiny packet looks like a fuzzy ball

A Wave Packet



- The underlying waves are still there, but hidden
- **The underlying waves can vibrate in all the dimensions of the universe, but we can only measure the physical part.**

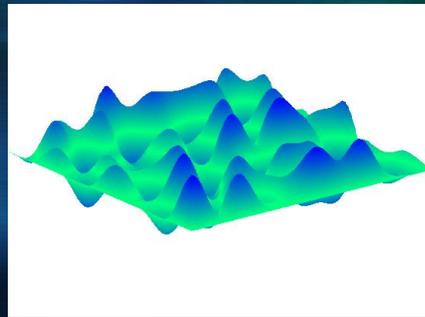
Waving in What?



- The next big question is what are these waves waving in?
- The unknown medium was named "Ether"

Waving in What?

- In 1885, the Michelson-Morley experiment proved that the **Ether did not exist** or at least it was **not physically observable**.



Nothing Physical

- Light and matter are waving in nothing (physical)
- The universe is ultimately made up of nothing (physical)

Someone or something is waving nothing and making something

Seen out of Unseen

Hebrews 11:1,3

Now faith is being sure of what we hope for and certain of what we do not see. By faith we understand that the universe was formed at God's command, so that **what is seen was not made out of what was visible.**

Unseen is Eternal

2 Corinthians 4:18

So we fix our eyes not on what is seen, but on what is unseen. For what is seen is temporary, but what is unseen is eternal.

Sustaining All Things

Hebrews 1:2-3a

But in these last days he has spoken to us by his Son, whom he appointed heir of all things, and through whom he made the universe. The Son is the radiance of God's glory and the exact representation of his being, **sustaining all things** by his powerful word.

Vibrating Over the Waters

Genesis 1:2

Now the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of God was hovering [vibrating] over the waters.

Some More Scriptures

Genesis 1:2

Now the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of God was hovering [vibrating] over the waters.

Colossians 1:17

He is before all things, and in him **all things hold together.**

Ponder: Sustaining

- God is constantly
 - holding,
 - sustaining, and
 - directing
 the vibrations and interference of these non-physical waves
- Controlling the waves controls what they make up: **everything**
- What does that tell you about God?
- You are in Him, and He is in you.

Ponder: Everything Made out of Spirit

- It is just as easy for God to change the state as keep it the same

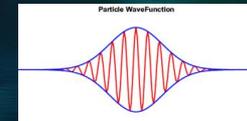
It is just as easy for God to do a miracle as it is to not do one – maybe even easier.

- How intimately does God know you?

Spirit

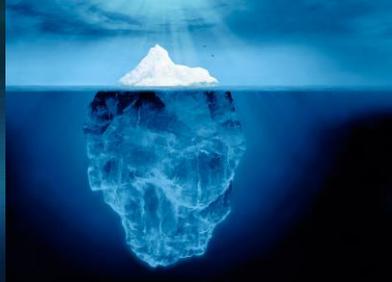
- Everything has a Higher Dimensional part
- The “tails” of the particles extend out and interact with other particles a tiny bit
- The Bible says that our spirits are not confined

We are spirit beings living in a spiritual world

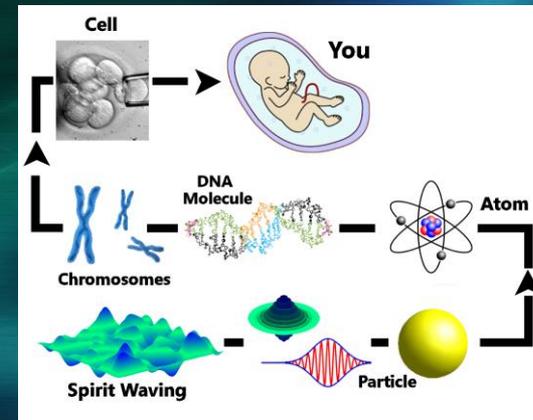


Iceberg Analogy

- Think of the physical as the tip of an iceberg
- The spiritual is like the part under water



Building Blocks



God's Sustaining Power

- I bless you with a deeper revelation of God's complete power and total control over every wave, atom, and everything in the universe, including you.
- I bless you with a deeper knowing of how much God is holding you in His loving arms and sustaining you.
- May you have a growing understanding of Christ in you, the hope of Glory (Col 1:27).
- May you have a growing understanding that you are in Christ (John 14:20), and therefore completely safe and secure.

Intimacy with God

- I bless you with a deeper knowing of how intimately God knows you. God knows everything about you and loves you just the way you are.
- I bless you with a deeper understanding of the spiritual part of yourself. I bless you to learn from the Holy Spirit how to grow in your awareness of the spiritual part of yourself.