My Drift

Title: Angels & Demons

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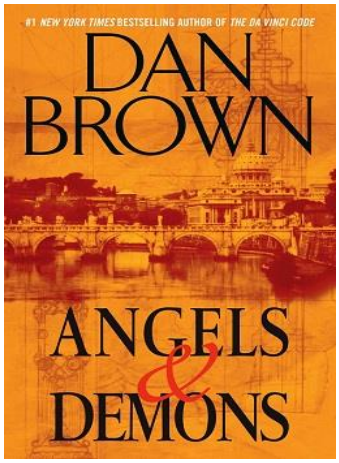


I just finished reading a book titled Angels & Demons written by Dan Brown. This is a very good book and most of the action takes place at Vatican City. Although this book is fiction, much of the information about Vatican City is true and aroused by interest in learning more.

Angels & Demons Recap

The explosive Robert Langdon thriller from Dan Brown, the #1 New York Times bestselling author of The Da Vinci Code and Inferno—now a major film directed by Ron Howard and starring Tom Hanks and Felicity Jones.

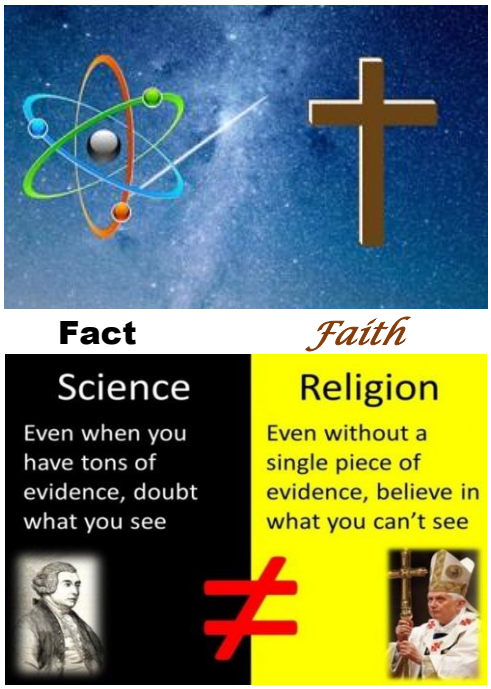
An ancient secret brotherhood. A devastating new weapon of destruction. An unthinkable target. When world-renowned Harvard symbologist Robert Langdon is summoned to his first assignment to a Swiss research facility to analyze a mysterious symbol—seared into the chest of a murdered physicist—he discovers evidence of the unimaginable: the resurgence of an ancient secret brotherhood known as the Illuminati...the most powerful underground organization ever to walk the earth. The

Illuminati has now surfaced to carry out the final phase of its legendary vendetta against its most hated enemy—the Catholic Church.

Langdon's worst fears are confirmed on the eve of the Vatican's holy conclave, when a messenger of the Illuminati announces they have hidden an unstoppable time bomb at the very heart of Vatican City. With the countdown under way, Langdon jets to Rome to join forces with Vittoria Vetra, a beautiful and mysterious Italian scientist, to assist the Vatican in a desperate bid for survival.

Embarking on a frantic hunt through sealed crypts, dangerous catacombs, deserted cathedrals, and the most secretive vault on earth, Langdon and Vetra follow a 400-year-old trail of ancient symbols that snakes across Rome toward the long-forgotten Illuminati lair...a clandestine location that contains the only hope for Vatican salvation.

Critics have praised the exhilarating blend of relentless adventure, scholarly intrigue, and cutting wit found in Brown's remarkable thrillers featuring Robert Langdon. An explosive international suspense, Angels & Demons marks this hero's first adventure as it careens from enlightening epiphanies to dark truths as the battle between science and religion turns to war.



Going along with the Angels & Demons plot, I'm going to address the ageless conflict between science and religion. I will give you my views later in this article.

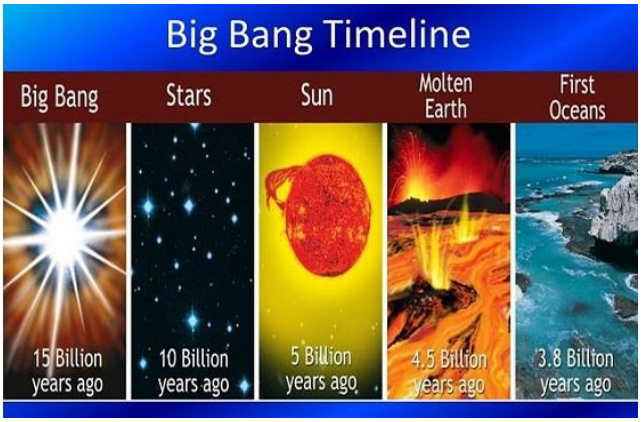
Why is there a conflict? Actually, science and religion are often not in conflict. Theologians don't care much about the tensile strength of steel when they have church buildings built. Scientists are generally not particularly interested in the functions of a soul. However, science and religion overlap on some topics. Each then generally puts forth conflicting beliefs on the same topic. The results of these conflicts can often strain the culture. cause needless suffering. and even generate loss of life.

Perhaps the most famous conflict was between Galileo Galilei (1564-1642) and the Roman Catholic Church, largely over the movements within the solar system. At that time, the Church interpreted the Bible as teaching the geocentric system in which the Earth is at the center of the Universe. The Sun, Moon, other planets, and stars revolved around the Earth.

Galileo taught the heliocentric system in which the Sun is the center of the solar system, the Earth and other planets revolved around the Sun, the Moon revolved around the Earth, and the stars were at incredible distances.

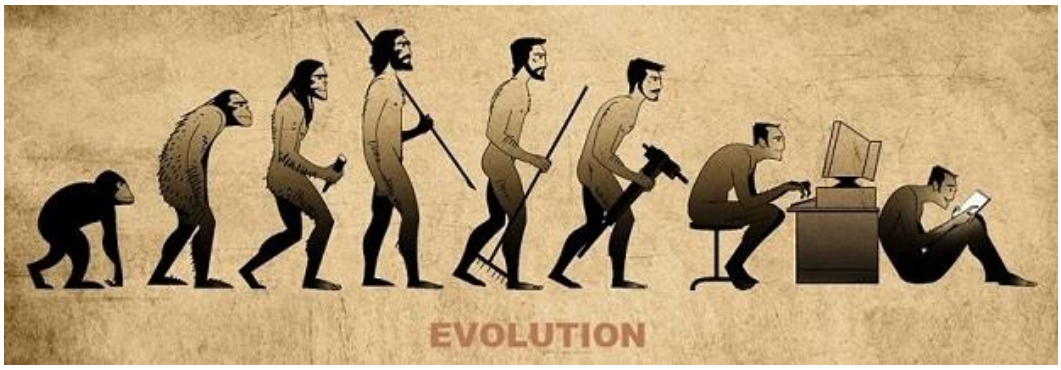
Galileo was tried by the Inquisition, condemned as a heretic, and spent the rest of his life in house arrest. Some 350 years after Galileo's death, Pope John Paul II gave an address on behalf of the Catholic Church in which he admitted that errors had been made by the theological advisors in the case of Galileo. He declared the Galileo case closed but he did not admit that the Church was wrong to convict Galileo on a charge of heresy.

Two major examples of conflicts between science and religion are:
Universe Creation:
Most conservative Christians believe in the inerrancy of the Bible. Although there are many competing theories over the details, many conclude that a literal interpretation of Genesis in the Hebrew Scriptures indicates that God created the world during a six-day, 144-hour period, sometime between 4004 and perhaps 8000 BCE.



Cosmologists have reached a near consensus that the universe is about 13.7 billion years old and that the Earth coalesced (elements combined to form its mass) about 4.5 billion years ago.

Evolution:
Most conservative Christians accept a literal interpretation of the biblical book of Genesis which seems to imply that all of the species of plant and animal life (including humans) were created during a six-day interval.



Most all biologists believe that the various species evolved over hundreds of millions of years, mainly or completely through the processes of natural selection.

Why do conflicts exist:

Disputes arise because science and religion are two very different disciplines.

- **Science is ultimately based on observation of nature. Scientists assume that things happen because of natural causes. Many scientists do not believe in the existence of one or more Gods. Others personally believe that one or more deities exist but assume that they do not interfere with nature.**
- **Religion is largely based on faith. There are over one thousand religious organizations in the U.S. and Canada within Christianity alone. By one account, there are 270 large religious groups in the world, and thousands of smaller ones. They hold diverse and often conflicting beliefs concerning deity, humanity, and the rest of the universe. Many believe that God revealed their faith to humanity in the form of sacred books. They believe that the consensus of all these scientists are at least partly false.**

Conclusion:

Thus, truth in a religious sense means agreement with a particular interpretation of a sacred book while truth in a scientific sense means agreement with observations. Working independently, scientists and theologians might be able to agree on some phenomenon, but in practice it seems to occur mostly by accident. Sometimes passages in the sacred books can be interpreted in such a way that they agree with scientific findings, but this often takes some creative thinking and imagination.

Vatican City

The Vatican's history as the seat of the Catholic Church began with the construction of a basilica over St. Peter's grave in Rome in the 4th century A.D. The area developed into a popular pilgrimage site and commercial district, although it was abandoned following the move of the papal court to France in 1309. After the Church returned in 1377, famous landmarks such the Apostolic Palace, the Sistine Chapel and the new St. Peter's Basilica were erected within the city limits. Vatican City was established in its current form as a sovereign nation with the singing of the Lateran Pacts in 1929.

Apostolic Palace

Sistine Chapel

St. Peter's Basilica

Inside St. Peter's Basilica

The Vatican on the Tiber River

The area off the west bank of the Tiber River that comprises the Vatican was once a marshy region known as Ager Vaticanus. During the early years of the Roman Empire, it became an administrative region populated by expensive villas, as well as a circus built in the gardens of Emperor Caligula's mother. After much of Rome was leveled in a fire in A.D. 64, Emperor Nero executed St. Peter and other Christian scapegoats at the base of Vatican Hill, where they were buried in a necropolis.

Emperor Nero

Early Christians were fed to the Lions

Having embraced Christianity with the Edict of Milan in 313, Emperor Constantine I began constructing a basilica over St. Peter's tomb in 324. St. Peter's Basilica became a spiritual center for Christian pilgrims, leading to the development of housing for clergymen and the formation of a marketplace that became the thriving commercial district of Borgo.

Following an attack by Saracen pirates that damaged St. Peter's in 846, Pope Leo IV ordered the construction of a wall to protect the holy basilica and its associated precincts. Completed in 852, the 39-foot-tall wall enclosed what was inaugurated Leonine City, an area covering the current Vatican territory and the Borgo district. The walls were continually expanded and modified until the reign of Pope Urban VIII in the 1640s.

Although the pontiff traditionally lived at the nearby Lateran Palace, Pope Symmachus built a residence adjacent to St. Peter's in the early 6th century. It was expanded hundreds of years later by both Eugene III and Innocent III and in 1277 a half-mile-long covered passageway was assembled to link the structure to Castel Sant'Angelo. However, the buildings were all abandoned with the shift of the papal court to Avignon, France, in 1309, and over the next half-century the city fell into disrepair.

Following the return of the Catholic Church in 1377, the clergy sought to restore the walled city's luster. Nicholas V circa 1450 commenced construction of the Apostolic Palace, eventually the permanent home of his successors, and his collection of books

became the foundation of the Vatican Library. In the 1470s, Sixtus IV began work on the famed Sistine Chapel, featuring frescoes created by such leading Renaissance artists as Botticelli and Perugino.

Significant changes to the city took place after Julius II became pope in 1503. Julius commissioned Michelangelo to paint the Sistine Chapel ceiling in 1508 and tapped architect Donato Bramante design the Belvedere Courtyard. The pontiff also elected to tear down the 1,200-year-old St. Peter's Basilica and have Bramante build a new one in its place.

The death of Julius in 1513 and Bramante the following year led to a decades-long dispute over how to continue the project, until Michelangelo ended the deadlock in 1547 with his choice to follow Bramante's original design. Giacomo della Porta completed St. Peter's celebrated dome in 1590, and work on the grand structure finally finished in 1626. Measuring 452 feet tall and encompassing 5.7 acres, the new St. Peter's stood as the world's biggest church until the completion of the Ivory Coast's Basilica of Our Lady of Peace of Yamoussoukro in 1989.

The Vatican Museums originated from the sculpture collection of Julius II, its earliest gallery opened to the public by Pope Clement XIV in 1773 and expanded by Pope Pius VI. Subsequent popes continued to bolster the renowned collections over the years, with the Gregorian Egyptian Museum, the Ethnological Museum and the Collection of Modern and Contemporary Religious Art among the additions.

The Vatican Museums

Popes traditionally held power over regional territories known as the Papal States until 1870, when the unified Italian government claimed virtually all of the land outside of the city walls. A standoff between the church and secular government ensued for the next 60 years, until an agreement reached with the Lateran Pacts in February 1929. Signed by Benito Mussolini on behalf of King Victor Emmanuel III, the pacts established Vatican City as a sovereign entity distinct from the Holy See and granted the church $92 million as compensation for the loss of the Papal States.

The Vatican remains the home of the pope and the Roman Curia, and the spiritual center for some 1.2 billion followers of the Catholic Church. The world's smallest independent nation-state, it covers 109 acres within a 2-mile border and possesses another 160 acres of holdings in remote locations. Along with the centuries-old buildings and gardens, the Vatican maintains its own banking and telephone systems, post office, pharmacy, newspaper, and radio and television stations. Its 800 citizens include the members of the Swiss Guard, a security detail charged with protecting the pope since 1506.

Swiss Guards

Pope Francis born Jorge Mario Bergoglio on 17 December 1936 is the 266th and current Pope and sovereign of the Vatican City State. Francis is the first Jesuit pope, the first from the Americas, the first from the Southern Hemisphere, and the first pope from outside Europe since the Syrian Gregory III, who reigned in the 8th century.

Pope Francis

Born in Buenos Aires, Argentina, Bergoglio worked briefly as a chemical technologist and nightclub bouncer before beginning seminary studies. He was ordained a Catholic priest in 1969, and from 1973 to 1979 was Argentina's provincial superior of the Society of Jesus (Jesuits). He became the Archbishop of Buenos Aires in 1998 and was created a cardinal in 2001 by Pope John Paul II. He led the Argentine Church during the December 2001 riots in Argentina. The administrations of Néstor Kirchner and Cristina Fernández de Kirchner considered him a political rival. Following the resignation of Pope Benedict XVI on 28 February 2013, a papal conclave elected Bergoglio as his successor on 13 March. He chose Francis as his papal name in honor of Saint Francis of Assisi.

Throughout his public life, Pope Francis has been noted for his humility, emphasis on God's mercy, concern for the poor and commitment to interfaith dialogue. He is credited with having a less formal approach to the papacy than his predecessors, for instance choosing to reside in the Domus Sanctae Marthae guesthouse rather than in the papal apartments of the Apostolic Palace used by his predecessors. In addition, due to both his Jesuit and Ignatian aesthetic, he is known for favoring simpler vestments void of ornamentation, including refusing the traditional papal mozzetta cape upon his election, choosing silver instead of gold for his piscatory ring, and keeping the same pectoral cross he had as cardinal. He maintains that the Church should be more open and welcoming. He does not support unbridled capitalism, Marxism, or Marxist versions of liberation theology. Francis maintains the traditional views of the Church regarding abortion, marriage, ordination of women, and clerical celibacy. He opposes consumerism and overdevelopment and supports taking action on climate change. In international diplomacy, he helped to restore full diplomatic relations between the United States and Cuba. Since the publication of Amoris laetitia in 2016, Francis has faced increasingly open criticism from theological conservatives, particularly on the question of admitting civilly divorced and remarried Catholics to Communion.

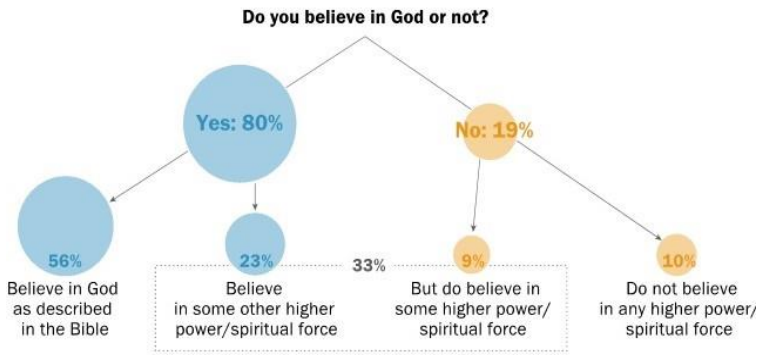
Some Statistics and Comments

I have never been to Vatican City or Rome, but I have been to the U.S. Naval Base in Naples, Italy to play basketball. This was back in the mid-nineteen sixties and I don't remember much about it. We flew from Rota, Spain to Naples, played a basketball game, went to a few bars, and flew back to Rota the next day. If I ever get to Italy again, I would most like to see Venice, then Rome along with the Vatican. This probably won't happen due to my age and a couple of other places I would rather see.

Percent of Americans who believe in God or a higher power or universal spiritual force?

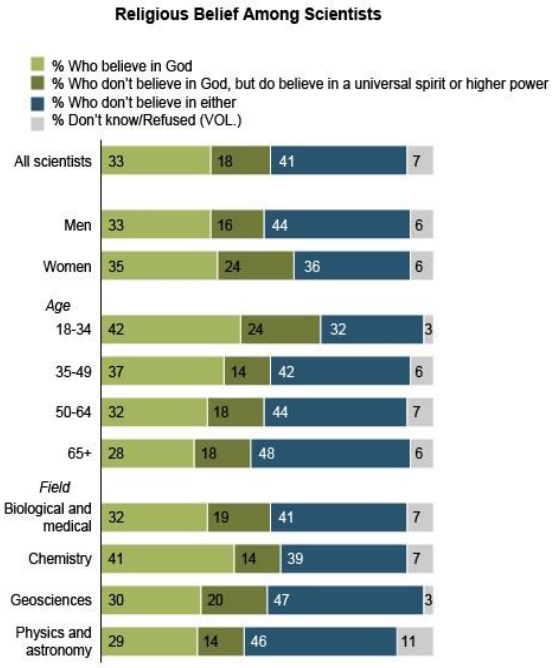
General Public = 89%
Scientists = 51%

General Public



(2016 Gallop Poll)

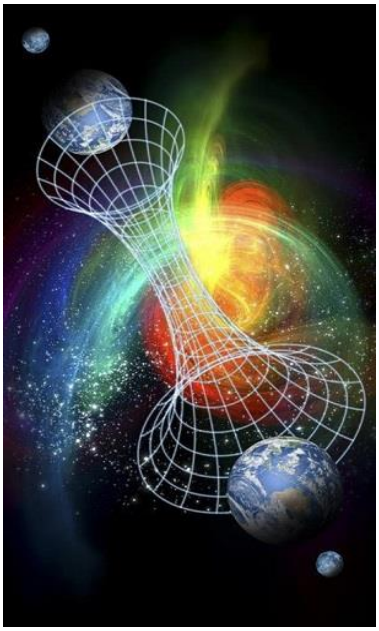
Scientists



As the above charts show, believing in God is alive and well in America. Even with all this talk about scientists not believing in God, over 50% of American scientists believe in God or a higher power or universal spiritual force.

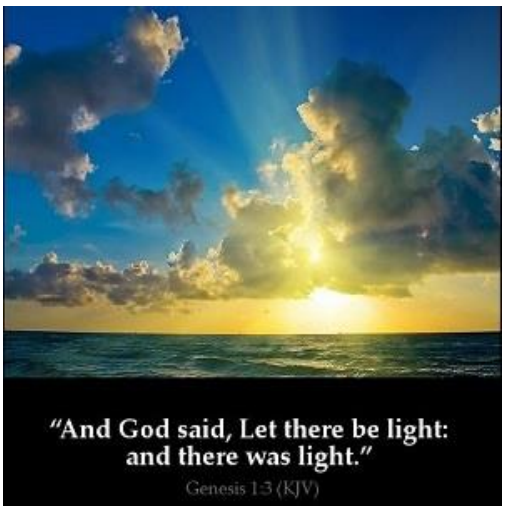
If you made it this far, you can probably tell that this article is about two things, the Vatican and the ongoing battle between Religion and Science. I believe in both and think God and Science are becoming more compatible every day. Here is some information about two technologies that blows many current scientific facts and theories right out of the water. If they confuse scientists, they will really be hard to understand for common everyday people like you and me.

Quantum Theory?



Quantum theory is the branch of physics that deals with the world of atoms and the smaller (subatomic) particles inside them. You might think atoms behave the same way as everything else in the world, in their own tiny little way—but that's not true: on the atomic scale, the rules change and the "classical" laws of physics we take for granted in our everyday world no longer apply. Things on a very small scale behave like nothing you have any direct experience about... or like anything that you have ever seen.

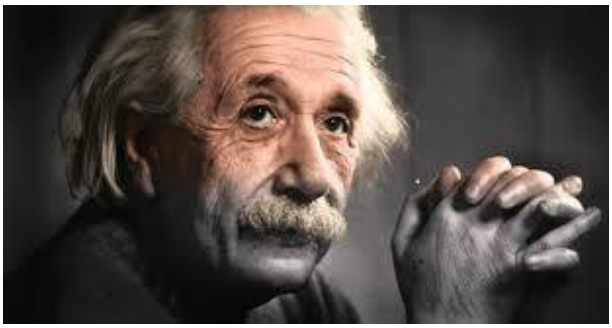
If you've studied light, you may already know a little bit about quantum theory. You might know that a beam of light sometimes behaves as though it's made up of particles (like a steady stream of cannonballs), and sometimes as though it's waves of energy rippling through space (a bit like waves on the sea). That's called wave-particle duality and it's one of the ideas that comes to us from quantum theory. It's hard to grasp that something can be two things at once—a particle and a wave—because it's totally alien to our everyday experience: a car is not simultaneously a bicycle and a bus. In quantum theory, however, that's just the kind of crazy thing that can happen. The most striking example of this is the baffling riddle known as Schrödinger's cat. Briefly, in the weird world of quantum theory, we can imagine a situation where something like a cat could be alive and dead at the same time!



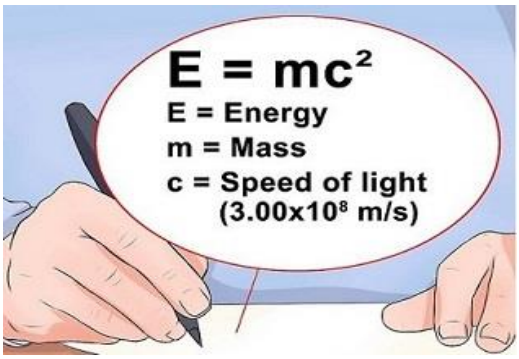
So, we understand that quantum physics defines that everything is made up of little bits of energy, but what is the force holding the quanta particles, atoms, sub-atoms, and molecules together? The answer is LIGHT. Light keeps electrons tied to the nuclei of atoms, and atoms tied together to make molecules and objects. All forms of matter are actually made up of solidified light. Here we find our second Biblical evidence of God's perfect design in the creation of this world, "Then God said, "Let there be light," and there was light. And God saw the light was good." (Genesis 1: 3-4). Throughout the rest of Genesis, God continued creating the world including the sky, the earth, the ocean, the sun, the moon, all the animals, plants, and finally, man. Light was the first thing He made before all else. Light was essential to create these things, since His design requires the light force to bind the particles together.

Antimatter

In modern physics, antimatter is defined as a material composed of the antiparticle to the corresponding particles of ordinary matter. In theory, a particle and its anti-particle (e.g., proton and antiproton) have the same mass as one another, but opposite electric charge and other differences in quantum numbers. For example, a proton has positive charge while an antiproton has negative charge. A collision between any particle and its anti-particle partner is known to lead to their mutual annihilation, giving rise to various proportions of intense photons (gamma rays), neutrinos, and sometimes less-massive particle–antiparticle pairs.



Albert Einstein



Annihilation usually results in a release of energy that becomes available for heat or work. The amount of the released energy is usually proportional to the total mass of the collided matter and antimatter, in accordance with the mass–energy equivalence equation, E = mc2.

Antimatter particles bind with one another to form antimatter, just as ordinary particles bind to form normal matter. For example, a positron (the antiparticle of the electron) and an antiproton (the antiparticle of the proton) can form an antihydrogen atom. Physical principles indicate that complex antimatter atomic nuclei are possible, as well as anti-atoms corresponding to the known chemical elements.

There is considerable speculation as to why the observable universe is composed almost entirely of ordinary matter, as opposed to an equal mixture of matter and antimatter. This asymmetry of matter and antimatter in the visible universe is one of the great unsolved problems in physics. The process by which this inequality between matter and antimatter particles developed is called baryogenesis.

Antimatter in the form of anti-atoms is one of the most difficult materials to produce. Individual antimatter particles, however, are commonly produced by particle accelerators and in some types of radioactive decay. The nuclei of antihelium have been artificially produced with difficulty. These are the most complex anti-nuclei so far observed.

Scientists at CERN laboratory in Switzerland scored a major breakthrough recently when they trapped atoms of anti-matter for the first time in history. Fans of Star Trek know the potential implications of this achievement, since the Starship Voyager uses matter/anti-matter annihilation to drive its engines. Maybe one day, we might be able to use anti-matter engines to take us to the stars.

The advantage of using anti-matter is that it is potentially 100 times more powerful than an ordinary H-bomb. Nuclear bombs are only 1% efficient in converting mass to energy (via Einstein's famous equation). But anti-matter, when in contact with matter, yields a 100% efficient conversion of mass to energy. In principle, it is the greatest energy source in the universe.

Anti-atoms at CERN were first produced back in 1995, but they only lived briefly before they annihilated with ordinary atoms. This time, physicists at CERN were able to trap 38 anti-hydrogen atoms (in a combination of magnetic and electric fields) for about 1/10 of a second, a remarkable achievement. It will take many, many decades or longer to produce large quantities of stable anti-matter, however. (In the movie "Angels and Demons," Tom Hanks has to stop terrorists who stole anti-matter from CERN and want to use it blow up the Vatican. Only a gram would be enough to blow up most of Rome but producing a gram of anti-matter is way beyond our capability.

So, although the recent achievement at CERN was a milestone, it may take many decades to centuries before we can harness the full power of anti-matter. (This time-period may be shortened if we find an anti-matter meteorite in outer space.) But Star Trek takes place in the 23rd century—so we still have plenty of time.

How Quantum Physics and the Power of Antimatter Proves God's Existence

Science and religion have been at divisive odds during Earth's entire existence…until recently, that is. The scientific phenomenon known as Quantum Physics (Quantum Theory) has been discovered and is being widely embraced by many scientific leaders. The more that is learned about quantum physics and the power of antimatter, the more we discover its Biblical basis and its proof of God's perfect design.

Okay, maybe Quantum Physics and the Power of Antimatter does not prove God's existence, but it does help bring science and religion much closer together.

My Views on the Ageless Conflict between Science and Religion

How the Universe was Created? God or the Big Bang Theory?

I'm going with God although He may have used some of the Big Bang concepts. Science cannot explain what existed before the Big Bang occurred. Some of the things they say were created during the Big Bang event are hard for me to believe. I think a Higher Power would be required to create the universe. However, I do think some of the time periods specified in the Bible are off by a few million or billion years.

How Man (and Women) were Created? God or Evolution?

I don't know about you, but I don't think my ancestors were monkeys or apes! Again, I'm going with God and the Bible account. However, I think once God created man and all the other creatures, a lot of species evolution has occurred over the years.

Do Spirits and Ghosts Exist? Yes or No?

There is no doubt in my mind that spirits and ghosts exist. Although I have not actually seen a ghost, I have felt and seen things that convinced me that they are real. There is a multitude of evidence all pointing to the existence of spirits and ghosts.

What!!! You have never heard of the Schrodinger's Cat Riddle?

A Cat, a Box, and a Riddle – Schrodinger's Cat

In 1935, Erwin Schrodinger tried to make a point with a metaphorical cat in a box. He was tackling what he saw to be an absurdity of the Copenhagen theory at that time that suggested the act of the observer influenced the behavior of subatomic particles. This relates to the concept that something like a photon is a wave until it's observed, at which point it becomes a particle.

Now, Mr. Schrodinger really didn't buy into this theory, so he came up with the wonderful thought experiment of Schrodinger's Cat. For those who aren't familiar with this, in this example illustrates the duality of particles, it goes like this:

The cat is in a sealed box. There is also capsule which, depending on a random trigger, will release poison into the box. Until the box is opened, the cat is in limbo, both alive and dead (a wave). When we open the box and observe the cat it becomes either very alive, or a very dead cat.

Before anyone writes in to complain about cruelty to the animals, just to point out this was an entirely a thought experiment!

Many have problems with this theory including Einstein himself. You can see why. If you think this through, does that mean as you are walking down the street, it dissolves into a fuzzy state of matter behind you until it's observed again? You can see why a lot of people weren't very happy about this theory. However, from Schrodinger's very famous cat, came the interpretation of the many worlds theory... parallel worlds in other words. Before you dismiss this all as madness, the super-positioning of matter (wave) and also being a particle at the same time, in two places at once, has been demonstrated in quantum physics labs. This is real... it happens... think about the profound implications as you watch this video:

https://therealnickcook.blogspot.com/2012/06/cat-box-and-riddle-schrodingers-cat.html

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