

The new movie "Angels and Demons" (running time 2 hours and 18 minutes) was both scientifically and theologically intriguing, I loved it. The plot involves an anti-matter bomb planted somewhere in the Vatican by a clue dropping lunatic. A modern day Sherlock Holmes (played by Tom Hanks) is put on the case of finding the bomb and the lunatic (or lunatics?) before the Vatican and the surrounding city of Rome is vaporized. The last 45 minutes are so unpredictable and unexpected that "Angels and Demons" must rank as one of the best "who-done-it" mysteries ever filmed.

In spite of all the media hype, I did not see any of what might be interpreted as blatantly anti-Catholic content. Quite the contrary, the cardinals were portrayed as genuinely warm caring people, the kind of people you would like to know more about. Only one scene bothered me; one cardinal was shown smoking a cigarette! [Note to future film makers: please do not show cardinals or presidents smoking].

Anti-matter expert Rolf Landua of CERN, the science advisor for "Angels and Demons" did an excellent job of making the movie realistic and believable. If we could make as much as the 0.25 grams of anti-matter mentioned in the movie (1/10 the mass of a penny) it could be stored in vacuum canister with a strong magnetic field inside. Also as portrayed in the movie, the canister would not have to be heavily shielded because lower molecular mass anti-matter (made by our accelerators) is normally not radioactive. And certainly, if 0.25 grams of anti-matter was allowed to come into contact with 0.25 grams of matter, a Hiroshima sized explosion would certainly occur, accompanied by a massive burst of X-rays -but no other radioactive fallout.

As pleased as I was with scientific accuracy of the film, the lack of theological advice from the Catholic Church or from any other competent theologians was just maddening. "Angels and Demons" could have been one of the most thought provoking movies of all time, but because of lack of insightful theological advisers it is just another good movie.

So, what theological fine points did the movie fail capitalize on? To begin with, the God of the larger Christian church, and the Catholic Church in particular, is triune. Our God considered it important enough to reveal to us that he consists of three persons with one nature. Unlike the Greek gods, if one of the members of the Trinity hates you, they all hate you.

(1 John 4:13-15 NIV) "We know that we live in him and he in us, because he has given us of his Spirit. And we have seen and testify that the Father has sent his Son to be the Savior of the world. If anyone acknowledges that Jesus is the Son of God, God lives in him and he in God."

(John 1:1-5 NIV) "In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. Through him all things were made; without him nothing was made that has been made. In him was life, and that life was the light of men. The light shines in the darkness, but the darkness has not understood it."

We believe our creator has left his signature everywhere; we only have to know what to look for. (Proverbs 25:2 SRP) "It is the glory of God to conceal a matter; to search out a matter is the glory of scientists." (Psalms 19:1-3) "The heavens declare the glory of God;

the skies proclaim the work of his hands. Day after day they pour forth speech; night after night they display knowledge. There is no speech or language where their voice is not heard."

Matter is composed of **three** types of stable particles: protons, neutrons, and electrons. Anti-matter is composed of **three** types of "mirror image" stable particles: anti-protons, anti-neutrons, and anti-electrons. Both matter and anti-matter protons and neutrons appear to be made of **three** smaller particles called quarks or anti-quarks, respectively. Non-Christian physics students usually breathe a sigh of relief when they learn that electrons and anti-electrons appear to be made of only two quarks or two anti-quarks, respectively. But then to their amazement they learn that light is also triune. In the most useful Dirac theory of light, a photon, the basic unit of light, consists of **three** parts: an electron (matter), a positron (an anti-electron), and a corkscrewing motion of the electron around the hole in nothing (that it pops out of) called a "positron". The clockwise or counterclockwise orbit of the electron around the positron probably gives rise to the attractive or repulsive properties of electromagnetic radiation (light) by which all things are shaped and held together.

(1 John 1:5) "This is the message we have heard from him and declare to you: God is light; in him there is no darkness at all." (Colossians 1:15-17) "He is the image of the invisible God, the firstborn over all creation. For by him all things were created: things in heaven and on earth, visible and invisible, whether thrones or powers or rulers or authorities; all things were created by him and for him. He is before all things, and in him all things hold together."

The intrigue of movie would have greatly enhanced by speculating that God the Father would have loved to visit the world himself, but could not because he is made of anti-matter. (John 3:16-21) "For God so loved the world that he gave his one and only Son, that whoever believes in him shall not perish but have eternal life. For God did not send his Son into the world to condemn the world, but to save the world through him. Whoever believes in him is not condemned, but whoever does not believe stands condemned already because he has not believed in the name of God's one and only Son. This is the verdict: Light has come into the world, but men loved darkness instead of light because their deeds were evil. Everyone who does evil hates the light, and will not come into the light for fear that his deeds will be exposed. But whoever lives by the truth comes into the light, so that it may be seen plainly that what he has done has been done through God."

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