

There is a story that Napoleon once had an audience with a famous French scientist, Pierre-Simon Laplace. Laplace had written a book titled, Celestial Mechanics, describing the workings of the solar system. The emperor said to him, “I see that your book has no mention of God.” To which Laplace replied, “Sire, I have no need of that hypothesis.” That attitude is a good summation of the modern popular view of the relationship between religion and science: the idea of God is outmoded. Science can explain the universe in purely materialistic terms.

But I have been reading a book by Michel-Yves Bollore and Olivier Bonnassies, entitled, God: the Science, the Evidence. It summarizes current scientific data about the beginning and the eventual end of the universe – and its strange qualities. And as much as many physicists and cosmologists regret it, the evidence is now clear and decisive. There actually is a need for the God hypothesis to make sense of the universe.

The Popular narrative of the relationship between science and religion – specifically Christianity, goes something like this. In old, pre-scientific ages, people believed what was in the Bible. They didn't know any better, but as we started developing a scientific mindset in the early modern era and applied the scientific method to nature, the Bible was proven to be wrong again and again – and therefore the faith was shown to be a myth – nice stories, useful perhaps for keeping the lower classes in line. But there is no God. It's all just matter, energy, etc. I'm simplifying, but my point is that for the past five centuries the assumption has been that science and faith are in conflict – and faith is always the loser.

But how things have changed -- if we're paying attention! In the past century, especially the past 50 years, scientific theories, observations, and experiments have revealed with growing certainty that there had to be a Creator of the universe and a Mind behind that creation. The science has become pro-God!

Why am I bringing this up today? This is November, when we consider the Four Last Things. The readings are focused on the end times. That is the nature of the Catholic world view. The Church teaches the physical universe is not cyclical or eternal. There was a beginning. God created everything out of nothing. And there will be an end. And God is the directing, even micro-managing, this story.

Most 20th century scientists believed that the universe was eternal and stable. There was no need of God – that hypothesis – because there was no beginning or end of the universe. In fact, Einstein and his circle were revolted at the idea of a universe with a beginning. The Big Bang theory – that all time, matter, space expanded from a single point about 13.8 billion years ago -- was mocked through most of the 20th century (the name itself was meant as a put-down!). The scientists who tried to champion this theory in the West were sidelined. In Nazi Germany and Communist Russia during the 1920s – 40s such physicists were exiled, jailed, or shot for

teaching the Big Bang. For teaching physics! But those regimes knew that the idea meant a Creator God and their ideologies couldn't accept that truth. But in 1964 the fossilized background radiation of the Big Bang was recorded. In 2003 three mathematicians won the Nobel for proving that it is impossible that the universe had an infinite past. There must have been an initial point of origin.

Similarly, there must be an end to the universe. If there is a beginning, there must be an end – a “Thermal Death” -- according to implications of the laws of thermal dynamics. As the universe keeps expanding at accelerating speeds, at some point, way in the future, all stars will eventually be extinguished, all sources of energy will be consumed, and the universe will go dark, cold, and dead.

An independent line of evidence for a Creator is the “fine-tuning” of the universe. It's called “The Anthropic Principle.” This idea only dates from the 1970s, but it is based on the observation

that as we learn more about the first seconds of the universe after the Big Bang, it is becoming ever clearer that the odds of the universe forming as it is – with its stars, chemistry, the fundamental forces that allow for life on earth – happening randomly are so astronomical that they are basically impossible. The obvious alternative is a Mind and an intention directing the universe.

Some scientists are grudgingly accepting this, many are not. Have you heard of the multi-verse theory? This is beloved by science-fiction writers and movies. This idea exists only because, if you refuse to accept the idea of God, the only option to explain the fine tuning of the universe for human life is to say it's all random, and there are a jillion universes out there somehow. And we just happen to live in the one universe with these settings. The only problem is that there is no evidence of this at all. Zip. The multiverse idea is an act of faith by atheists who don't want to believe in a Creator.

I'm preaching on this today, first, because I want to underline that our faith is reasonable. Where faith and science seem to contradict, either the faith has been misunderstood by us (as with what parts of the Bible should be interpreted literally), or the science has been mistaken and will change (as cosmology is changing).

But second, because what God does for the universe, it is reasonable to believe, He will also do in human salvation history – a beginning, an end, and divine direction. Now, nobody is saying that these scientific discoveries prove God became a human as Jesus of Nazareth, etc. We still need faith. But it is ever clearer that it's rational to believe, even on scientific evidence alone, that there is a God who created the universe from nothing, that it will end, and that He is involved in its the smallest details.

And if that is true for the history of humanity, then will He not also attend to our own lives in a similar way? God created us. He directs us by His grace. And there will be an end point and

judgement for each of us. This November let us consider these solid truths -- and believe and live accordingly.