

God versus the Big Bang

This is yet again, as seen throughout history, a case of Religion against Science; probably the longest fought secret and not-so-secret war known to mankind. There will always be collisions between Religion and Science. The nature of science is to probe at the unknown and in most cases the unknown is nicely taken care of by religious beliefs.

In Science the Big Bang theory is seen as the most possible explanation to the creation of the Universe and in Christian Religion and in most others the dawn of creation was started by a supreme being, which we have called God without a better word to describe this Supreme Being.

Science tells us that the Universe was created by a mighty explosion called the Big Bang where all matter that we see around us was created, but how can that be there must have been something there beforehand for this event to take place? The most fundamental laws of modern physics tell us that matter can not be just created--it needs something to be there, either in the form of other matter or energy.

$$E = \Delta mc^2$$

This is Einstein's famous equation which shows us that energy (E) will be converted into mass (m) at the speed of light squared (c^2). So this would mean that the big bang theory is not quite correct and would need sufficient modifications to discount the idea of God. As astrophysicists we are told that we are not supposed to even think about this as we can **never** see back to the big bang, the furthest back we can go is when the Universe became transparent, before then the light that was emitted was absorbed and so this would mean that the photons created before the Universe became

transparent can never be seen. The point where the Universe became transparent is known as the **Epoch of Equality** this was when the Universe was approximately 3000 years old.

Christianity's holy book the Bible tells us that the Earth was created in six days. Six days--what does that exactly mean? The changes that the Bible describes could not have taken place in just six twenty-four hour days. It is just not enough time in physical terms. What if however those six days were not what we perceive as six days? On this planet there are places where the length of day is not 24 hours, if we define a day as one complete cycle from sunlight into darkness. This is seen at the poles where a 'day' lasts the same time as does a whole year in other parts of the world. They have six months of darkness and six months of light, and perhaps in the Bible also the term 'day' is not meant to mean simply a single rotation of the Earth about its axis. Another example of this is the planet Mercury, in the case of the planet that is the closest planet to our Sun. It has an orbital year of 88 days (the time it takes to orbit the Sun; ours is 365.25 days) and completes a rotation once every 58 days, meaning that three days on Mercury last for two of its years. In fact an example of a year being less than a day can be seen on a planet very similar to our own, Venus. On Venus one year takes 225 Earth days and the planet rotates once every 243 days, so a year on Venus is less than a day.

So could these six "days" actually be six stages? Possibly, and although this does sound a bit like science fiction, you could also turn the coin the other way round and now the Bible seems like science fiction.

Does this mean that the Bible may not merely be a story of how the Earth was formed by some supreme being but in fact a scientific description on how the Earth, the Sun and the whole Universe were formed? If this is the case then for the last two thousand years at least religion and science have actually been agreeing with each other, never quite realising that they were both saying the same thing with slightly different interpretations.

This would mean that mankind's greatest of struggles seems to have been solved along time ago and so most of modern cosmology is in one little book without the hard mathematics. To me this sounds like a great idea, I just wish someone had found this out before the greatest minds of the last few centuries discovered the mathematics.

By Samuel Joseph George