

## References, Quotes and Readings – Graham’s Sessions

### Session 1: The Science Delusion

### Session 2: Let there be light ...!

### Session 3: A Cosmos fine-tuned for life

#### Bible references:

Romans 1:20          Psalm 8:3,4          Isaiah 55:8,9  
Proverbs 8:22-31    1 Corinthians 1:24    Genesis 1-2:7

#### Quotes:

“Whence arises all that order and beauty we see in the world?”

*Isaac Newton (1643-1727)*

(the delight of scientific enquiry allows us to ...) “think God’s thoughts after Him”

*Johannes Kepler (1571-1630) (theoretician)*

“The most incomprehensible thing about the world (Universe) is that it is comprehensible”

*Albert Einstein (1879-1955)*

“We are not reading rationality into an irrational universe but responding to a rationality with which the universe has always been saturated”

*C.S. Lewis (1898-1963) (taken from ‘Christian Reflections’)*

“The best data we have concerning the Big Bang are exactly what I would have predicted, had I nothing but the five books of Moses, the Psalms, the Bible as a whole”

*Arno Penzias (astrophysicist and Nobel laureate)*

“Astronomy leads us to a unique event, a universe which was created out of nothing, one with the very delicate balance needed to provide exactly the right conditions required for life, and one which has an underlying, one might say ‘supernatural’, plan”

*Arno Penzias (astrophysicist and Nobel laureate)*

“I cannot believe that our existence in this universe is a mere quirk of fate, an accident of history, an incidental blip in the great cosmic drama. Our involvement is too intimate ... We are truly meant to be here”

*Paul Davies (theoretical physicist)*

“A commonsense interpretation of the facts is that a super-intellect has monkeyed with the physics”

*Fred Hoyle (atheist scientist and mathematician)*

“The more I examine the universe and the details of its architecture, the more evidence I find that the universe in some sense must have known we were coming”

*Freeman Dyson (eminent theoretical physicist)*

“The imagination of Nature is far, far greater than the imagination of man”

*Richard Feynman (physicist and Nobel laureate)*

**Notes and readings:**

For more information on the 'Fine-tuning' argument, see:

**God: New Evidence** – 6 short videos on [www.focus.org.uk](http://www.focus.org.uk) (or UTube)

“When you drop a glass, you can think of the event in terms of the earth’s gravitational field pulling on the glass, or, using Einstein’s more refined geometrical description, you can think of it in terms of the glass sliding along an indentation in the space-time fabric caused by the earth’s presence, or – if gravitons do indeed exist – you can also think of it in terms of graviton particles firing back and forth between the earth and the glass, communicating a gravitational “message” that “tells” the glass to fall towards the earth.” p. 255.

“The Big Bang is a theory ... that delineates cosmic evolution from a split second after whatever happened to bring the universe into existence, but *it says nothing at all about time zero itself*. And since, according to the Big Bang theory, the bang is supposed to have happened at the beginning, the Big Bang leaves out the bang. It tells us nothing about what banged, why it banged, how it banged, or, frankly, whether it ever really banged at all.” p. 272

Readings from *Brian Greene: ‘The Fabric of the Cosmos’*, Penguin books, 2004

“However, if we do discover a complete theory, it should in time be understandable in broad principle by everyone, not just a few scientists. Then we shall all, philosophers, scientists and just ordinary people, be able to take part in the discussion of the question of why it is that we and the Universe exist. If we find the answer to that, it would be the ultimate triumph of human reason – for then we would know the mind of God”

Reading from *Stephen Hawking: ‘A brief history of time’*, Bantam, 1988

“Now all true scientists are aware, of course, that science is not infallible: theories change ... . Most scientists, though, are critical realists. They believe that they are making steps towards grasping the truth about the universe, but they are prepared to modify their theories if the evidence warrants it. We Christians need to remind ourselves of ... two dangers ... . Firstly, we must beware of tying our exposition of Scripture so close to science that the former falls if the latter changes. On the other hand, we would be very unwise to ignore science through obscurantism or fear, and present to the world an image of Christianity that is anti-intellectual. No Christian has anything to fear from true science. Many Christians have made, and continue to make, first-rate contributions to science”

Reading from *John Lennox: ‘Seven days that divide the world’*, Zondervan 2011

“In a single blinding pulse, a moment of glory much too swift and expansive for any form of words, the singularity assumes heavenly dimensions, space beyond conception. The first lively second (a second that many cosmologists will devote careers to shaving into ever finer wafers) produces gravity and the other forces that govern physics. In less than a minute the universe is a million billion miles across and growing fast. There is a lot of heat now, 10 billion degrees of it, enough to begin nuclear reactions that create the lighter elements – principally hydrogen and helium, with a dash of ... lithium. In three minutes, 98% of all matter there is or will ever be has been produced. We have a universe. It is a place of the most wondrous and gratifying possibility, and beautiful too. And it was all done in about the time it takes to make a sandwich”

Reading from *Bill Bryson: ‘A short history of nearly everything’*, Black Swan, 2003