

**GELORUP ANGLICAN CHURCH 15/5/2016 PENTECOST 2016: GEOFF CHADWICK:  
PENTECOST AND THE UNIVERSE'S BACKGROUND RADIATION**

Today is the feast of Pentecost when we think about the nature of God's Spirit in the world. We've heard the story of the outpouring of the Spirit on those shut in first disciples. Also, in the story, the mention of every nation known at that time underlines the idea of God's presence everywhere. God's Spirit is not confined to that shut-up little room but is to be found everywhere. The reading is a sort of undoing of the story of the tower of Babel. You remember, when multiple languages were invented to confuse the people and their arrogance. Now, at Pentecost, the languages of everywhere are spoken. The message is clear: God is at work everywhere.

This brings me to my theme this morning. It's a bit musical and a bit scientific - but like I said God is to be found everywhere!

**Beginning with music.**

In ancient times there was the idea that each of the planets in the sky moved with a signature musical note. Commonly known as the music of the spheres there was speculation on how these notes might sound and on what harmony they would sing together. Of course no one had heard these notes - but that didn't matter. As we now know "In space no one can hear you scream" (The Alien movie) but why ruin a good story with the truth! It was the idea that mattered and the idea is this: That the heavens produce harmony and this harmony forms a "background hum" throughout the cosmos.

The implication is that in this chaotic world there is, in the end, a background harmony to be found.

Many centuries later - in the middle of the last one in fact - even CS Lewis got in on this idea. In the beginning of his Narnia Series, Aslan the Lion (who represents Christ) sings the created world into being. As he sings, all manner of creatures are called into existence. (It's a beautiful passage and can be found in "The Magician's Nephew.")

**Now comes the science bit!**

In 1939 the Astro-Physicist Edwin Hubble using the ideas of Georges Leamaitre, proposed the "Big-bang" theory of the origin of the Universe. His theory was based on observation. He had been measuring the apparent motion of the stars and discovered that every star was moving away from every other star. When his projected their courses back in time he discovered that they had all had originated from a single point in space. It was as if there had been a sudden expansion of space and time from a single location. This had expanded into the universe.

We now call this common point a "singularity" and know that it burst into being about 14 billion years ago. The universe has been expanding ever since - not into time and space - but as time and space. It's a bit hard to get your head around it. The idea is that you can't

talk about "before" the Big-bang because time began at the big-bang. Also you can't think of space before then because the Big- bang is making the space...

Scientists soon realised that if the Big-bang was true then there must be some "Cosmic Microwave Background Radiation" (CMBR or CMB) left over from this explosion that could not be accounted for in terms of the radiation coming from the stars.

In 1965 this background radiation was detected. Its discovery is a curious one. Being weak, this radiation cannot be seen, and can only be detected as radio waves. In 1965 Arno Penzias and Robert Wilson were working with one of the world's first radio telescopes. But they had a problem. No matter where they pointed the telescope they encountered interference. There was a "hum" interfering with the signals. They tried everything they could to eliminate the hum, thinking it was an electrical fault with the device or some other thing. Then suddenly it dawned on them- they had detected the predicted- but not yet found- "Cosmic Microwave Background Radiation" of the universe. Once they measured it, it was found, as predicted by calculations, that the Universe was warm- -270 degrees C- or 3 degrees Kelvin. This might not sound like much but this is the residual heat left over from the Big bang and is the heat that can't be accounted for by looking only at the existing stars.

My romantic self (in the classical sense) likes to think that they had found the "music of the spheres".

Maybe not a sweet harmonic tune- but an omni-present background hum.

(Incidentally, Penzias and Wilson were granted the Nobel Prize for physics in 1978. Not bad for originally thinking you had faulty equipment!)

So what has all of this got to do with the celebration of Pentecost?

I see it as a metaphor. But first I must be careful not to make the mistake of simply equating natural phenomena with God. That is the mistake of pan-theism. As Christians we do not subscribe to this idea - but we do admit that all natural phenomena bear the "trademark" of God. So I suggest this "background radiation" of the universe is a trademark of God. It is a reminder to us that God's Spirit is present in all things. Even the universe is not stone cold. It is warm!

Sometimes we think the Universe, or the world is a dark, cold, inviting place - especially when life gets like that. But there is hope in knowing that even in the Universe there is some warmth! Perhaps this radiation could be a sign that points to God's abiding Spirit? No matter what happens in life we cannot be abandoned. The Spirit will make its presence known - even in the most accidental of ways.

Recently I recalled the story of my pre-ordination training interview with Bishop Brian Kyme. There I was- a stunned 22 year old- sitting before a Diocesan Bishop wondering

what confusing thing God was calling me to do with my life. I'll never forget how that interview began.

After the greetings he said:

"So you think God's calling you to be ordained?"

"Yes" I said.

"That's Marvellous." He said. "Now tell me your story."

"That's Marvellous." These two surprising words were exactly what I needed to hear. These words had emerged from the background presence of God's Spirit, warmed away the coldness of my fears and enabled me to speak.

Some 20 years later I bumped into Brian Kyme and was able to thank him for his sensitive handling of this very important moment in my life. He, of course, had forgotten it. But that's OK because the moment was for me and not for him.

So I invite you to think of a time when that background Spirit of God has come into your life:

- Just when you needed it.
- When the right word was given to you.
- When things worked out in a way you never imagined.
- When insignificant things you said or did ended up making a big difference to someone's life.
- Or when a moment has caught you unawares and you've had a sudden sense of being caught up in the joyous, unfathomable fabric of the Universe.

Such moments are God's Spirit at work. And every now and again what is background becomes the foreground and we sense it's humming.

The Lord be with you.

**And also with you.**