

How Runaway Expansion of the Universe Works

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declan@netspace.net.au

By applying the principles of Energy Field Theory outlined in my earlier papers the runaway expansion of the Universe can be explained:

Each particle in the Universe is a three dimensional waveform that extends in all directions to infinity, but whose amplitude (energy density) rapidly diminishes with distance, such that the greatest energy density exists within a very small volume where the particle is said to exist (the particle's classical boundary) – therefore the particle appears to us to be a point entity existing at a single location and unconnected to the rest of the Universe.

The energy waves that comprise a particle have a certain frequency or mix of frequencies that are characteristic for each type of particle. Different fundamental particles have different frequencies comprising them and therefore result in different masses and properties (higher frequency waves have more mass/energy than lower frequency waves with the same amplitude).

When a number of particles are placed together to form a composite body (either a small object such as an atom, or a very large object such as a star) the waves from each of the component particles sum together – the waveforms must be integrated. The result of the integration is the waveform for the composite object.

When any sort of waves are summed together (occupy the same space) the frequency of the resulting sum is comprised of the sum and the difference of the frequencies of the original wave components – this is the mathematical nature of what happens to waves when they are added together in the same space. Therefore when a number of particles are integrated, the space surrounding the composite body (where each of the component particles' waveforms extend) contains energy at a much

higher frequency than each of the component waves. Thus for a large body such as a star – where the number of component particles is enormous – the energy in the space surrounding the star contains extremely high frequency energy waves as a result of the integration of all of the component waves from each of the particles.

So the resulting picture is that of an object made from localized three dimensional wave-centers of a variety of frequencies (where most of the energy resides) embedded in a surrounded by an “ether” or fine mist of extremely high frequency waves. These ethereal waves are one and the same as the “quantum foam” that is known to exist in the vacuum. Due to the extremely high frequency nature of these “ether” waves they penetrate all of the waveforms of the particles without imparting momentum to them. In fact, if you read the rest of my papers on Energy Field Theory you will see that there is so much of this ether wave energy that it forms the medium on which the particles’ waves travel – but that is another story.

Another principle of Energy Field Theory is that waves reflect at the nodes in a waveform, such that in a standing wave, for example, where two waves of matching frequencies traveling in opposite directions (resulting in a wave that oscillates on the spot without moving), between each of the nodes of the standing wave energy is trapped like light between two parallel mirrors. Therefore each time the wave reflects at the node it imparts momentum to the node and is reflected back in the opposite direction. When the energy on each side of the node is of matching frequency and amplitude both waves impart the same momentum on each other and thus the node remains in the same location. If not then the node will move and the perfect standing wave will be lost, and energy will start to flow.

If you now imagine the whole Universe comprised of billions of stars (each being a composite of fundamental particles that are integrated together in the manner I outlined earlier) and then integrate each of the stars to form the whole Universe, you can imagine just how high the frequency of the ether waves is – it is many orders of magnitude higher than the frequencies of the waves that comprise particles.

As there is such a huge difference in the frequencies between the ether waves and the particles they are not in resonance with each other and so do not impart momentum on each other like in the standing wave example I gave a moment ago. However the ether waves themselves exist at very similar frequencies, and so are constantly reflecting off each other

and imparting momentum on each other. This amounts to a pressure within the ether waves pushing in all directions all the time.

Now if you imagine that the whole Universe is comprised of a huge number of particles in a complete true vacuum (I mean a true vacuum devoid of both particles and ether waves) then there exists a structure of three dimensional wave structures located in truly empty space. So at the edges of the Universe (where the energy density diminishes to nothing) there is no pressure inward from ether waves to balance that that pushing outwards. Thus the entire wave structure of the Universe is exploding like a spring into a truly empty vacuum.

Now as the particles are the wave centers that are the source of the ether waves and cannot be disconnected from them, wherever the ether waves go the particles follow & vice versa. So when the ether waves expand due to the pressure that exists within them, they carry the particles (stars etc) with them. Conversely, however, when particles are attracted to one another via gravity, the ether waves that are attached to those particles follow the particles motion also.

So you can see that there are two opposing effects:

- (1) particles (wave centers) are attracted to one another – gravity.
- (2) ether waves are pushing off one another.

Depending on the strengths of these two effects the Universe will either expand or contract – and in fact may be expanding in some places and contracting in others, depending on the distribution of matter (energy) in space. But as the whole distribution of energy that comprises the physical Universe exists in a true complete vacuum, the overriding effect is that of expansion. Also as the masses become further and further separated from one another, the attractive force of gravity between the wave centers becomes less and less, and the repulsion force of the ether waves takes over, causing accelerating expansion.

So as you can see the Universe can both pull and push at the same time, but the pushing will overtake the pulling eventually, causing the expansion of the Universe to accelerate as the Universe evolves.