The Non-Equilibrium Principle of Life Formation

Jeffrey J. Wolynski Jeffrey.wolynski@yahoo.com November 22, 2017 Rockledge, FL 32955

Abstract: A simple principle is added to stellar metamorphosis to begin explaining how thermodynamics actually applies to the beginnings of life.

Since it is well understood now by dissidents to mainstream dogma that exoplanets are evolved/evolving/dead stars (astrons), we can make some observations to the nature of life and how it began. The principle of non-equilibrium is quite simple, the further from equilibrium an evolving star is as compared to its surroundings, the higher likelihood it will form life in its future, given it began from a sterile state. The example is as follows. Given two objects in outer space with all variables matching except for their enthalpy (heat), the hotter will have a higher likelihood for forming life. So the Sun, with surface temperature of ~5,700 Kelvin will, in its future, have a much higher chance of forming the molecules and biochemistry necessary for life as opposed to Pluto, which can reach 40 Kelvin on its surface, given both were completely sterile. In fact, Pluto is so close to being in equilibrium with outer space as opposed to the Sun, that it is safe to realize that even the formation of water will have ceased on Pluto, and is currently being formed in huge quantities from the Sun (hydrogen combining with oxygen) in comparison. It is common sense really, if there is less motion due to objects being in equilibrium then nothing will happen, because there is nothing to push/pull the molecules around to combine, break apart and mix. The molecules need to jiggle around a lot to form biochemical precursors to life, but they can't jiggle at the same rate either, so there is a slow, steady decrease of the star from non-equilibrium to equilibrium. This of course happens over billions of years, and is covered via the time principle of life formation. A star spends its entire evolutionary timeline trying to reach equilibrium via gravitational collapse, but is prevented by the physical contraints of matter preventing complete collapse.

In essence, non-equilibrium means life will form and the closer to equilibrium you reach the closer to the prevention of life forming will be realized. In a literary sense, people got it backwards. Hell is in outer space where it is cold, so very cold, as objects radiate away into the heat bath known as interstellar space all of their energy. The heavens, or the place outside of Earth is where the hell is, and inside the ground is where heaven is, where the molecules can still move and jiggle around, and where the Earth is still hot. A star being a giant dissipative structure in non-equilibrium is the central tenet to the inevitable formation of all life on that star as it evolves. So now we have an additional definition for life, a process occurring as a direct result of a star trying to reach thermal equilibrium. What this means reader is that life is as inevitable as a star shining and cooling down, it is a by-product of a star. In a metaphysical sense, we are literal star children. The Earth made us.