

Does cometary panspermia falsify dark energy?

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Abstract

The 2011 Nobel Prize for physics has been awarded to Saul Perlmutter, Brian P. Schmidt, and Adam G. Riess "for the discovery of the accelerating expansion of the Universe through observations of distant supernovae", judged to be the "most important discovery or invention within the field of physics" (Excerpt from the will of Alfred Nobel). Are we forced by this claimed discovery to believe the universe is dominated by anti-gravitational dark energy? Can the discovery be falsified? Because life as we observe it on Earth is virtually impossible by the standard Λ CDMHC model, extraterrestrial life and cometary panspermia may provide the first definitive falsification of a Nobel Prize in Physics since its first award in 1901 to Wilhelm Röntgen for his discovery of X-rays.

1. Introduction

Must we believe the universe is dominated by anti-gravity? According to the standard Λ CDMHC "concordance" cosmology (CC), we should accept dark energy as 70% of the mass energy of an open, explosively expanding universe where the first star and a few planets first appeared after about 400 Myr. The Nobel Prize in physics committee is taking the advice of the CC community that has no other explanation for the supernovae Ia dimming than accelerating expansion of the universe. Could this CC-community of distinguished scientists and the Nobel Prize committee on Physics be wrong? Yes, if the "discovery" can be falsified. According to the Gibson (1996) and Schild (1996) hydrogravitational dynamics cosmology, the dark matter of galaxies is primordial gas planets in trillion-planet clumps from which all stars are produced. Dark energy is a systematic dimming error from ambient planets surrounding every star, 30,000,000 planets per star. Evidence supporting the existence of this vast population of planet-clumps is flooding in from the new telescopes. Novae produce emission spectra from complex life on these planets (see Fig. 1) that is particularly hard to explain otherwise.

We suggest a combination of astrophysical and genetic evidence promises the inevitable demise of the permanent dark energy concept (Gibson, Wickramasinghe and Schild 2011; Joseph and Wickramasinghe 2011). HGD cosmology proves that cometary panspermia has a solid astrophysical basis by falsifying Λ CDMHC and providing the primordial planets and comets required for early and widespread extraterrestrial life. Cometary panspermia falsifies the 2011 Nobel Prize for physics because it proves that widespread, and primordial, extraterrestrial life exists. As it becomes clear that life has existed on primordial planets since two million years after the cosmological big bang, and could not

possibly exist or propagate to the handful of planets per star predicted by CC-cosmology, eventually the jury that decides whether dark energy exists will cease to believe in it.

2. Theory

Convincing arguments and observations support the existence of a cosmological big bang origin of the universe 13.7 billion years before the present time. How did it begin? Only turbulence vortex dynamics can explain the enormous stresses required at Planck scales to overcome gravity, and the resulting anisotropies observed in the largest scale spherical harmonics of the cosmic microwave background, Schild and Gibson (2011).

Another flaw in CC-cosmology is the consistent neglect of kinematic viscosity ν in determining the formation of gravitational structures, Gibson (1996). Gluon viscosity produced inflation from negative stresses, and 10^{97} kg of mass-energy at 10^{-27} seconds. Photon viscosity produced the first structures of the plasma epoch with the density of globular star clusters at 10^{12} seconds, with galaxies as the smallest fragments at 10^{13} seconds. Primordial gas viscosity predicts Earth mass planets at this time of plasma to gas transition. A second (Jeans) scale of fragmentation of the gas results from the large difference between the sound speed and light speed, causing fragmentation of globular star cluster GC mass clumps of primordial planets with GCs in all galaxies identical.

HGD cosmology consists of a sequence of phase transitions starting with a turbulent big bang permitted by Planck temperatures of a big crunch, where only Planck particles and antiparticles exist and the only length scale is 10^{-35} meters. Inertial vortex forces of the turbulence easily provide sufficient antigravitational stresses to overcome the Fortov-Planck “dark energy” $\Lambda_{FP} = c^7 h^{-1} G^{-2} = 10^{113}$ Pa, where c is the speed of light, h is Planck’s constant and G is Newton’s constant. Gluon viscous stresses explain inflation. Photon viscous stresses explain protosuperclustervoids and protogalaxies fragmented during the plasma epoch. Protogalaxies are more massive than protoplanets because the photon viscosity is 10^{13} larger than the gas viscosity at transition.

Contrary to CC-cosmology, the enormous diffusivity D_{NB} of the non-baryonic component of the universe compared to the viscosity and diffusivity of the baryonic components causes their separation at galaxy scales. Cold dark matter, if it existed, could not condense or clump or hierarchically cluster because $D_{NB} \gg D_B$. Instead this most massive component of the universe is nearly irrelevant to gravitational structure formation, and diffuses to form large-scale halos of galaxy clusters and superclusters.

Evidence of extraterrestrial biology is particular hostile to the validity of CC-cosmology, which relies on the condensation of cold dark matter in clumps during the plasma epoch that must cluster to form gravitational potential wells that collect the baryons and eventually form the first stars and a few planets after nearly half a billion years at temperatures much too cold to foster life.

3. Observations

The most important observations relevant to cosmology were not those of supernova dimming leading to the 2011 Nobel Prize in Physics and dark energy but of quasar microlensing by a galaxy, giving the unexpected result that the dominant point mass objects of the galaxy were not stars but planets, Schild (1996). This enormously massive population of planets was correctly interpreted by Schild as the missing mass of the galaxy. The discovery revolutionizes cosmology and all of astronomy. Stars must come from the planets, rather than planets coming from stars. Since all stars must be formed in dense clumps of planets, it seems obvious that the planets surrounding such stars could cause systematic dimming errors in supernova brightness that could be misinterpreted as evidence of dark energy driven accelerated expansion of the universe. This source of error has not been taken into account by CC-cosmology.

Clearly so many planets must be composed of primordial gas, and must be relevant to the formation of life. Observations support the Gibson, Wickramasinghe and Schild (2011) claim that life began soon after the plasma to gas transition.

The existence of planets in clumps as the dark matter of galaxies certainly calls the dark energy hypothesis into question. Biological evidence that life began at primordial times on primordial planets cannot possibly be reconciled with CC-cosmology, the accelerated expansion of the universe, and the dark energy explanation of the accelerated expansion.

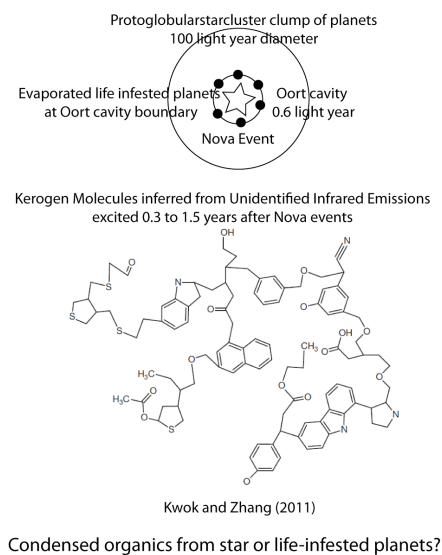


Figure 1. Complex chemicals inferred from infrared emissions following Nova events begin at times reflecting the size of Oort cavities produced when stars are formed from planets in PGC clumps.

Recent infrared telescopic evidence of complex organic molecules similar to kerogen is provided by Kwok and Zhang (2011). Kerogen is the part of coal shale that cannot be dissolved, versus bitumen, which can. Bright infrared emissions are observed starting about 0.3 years after star Nova events, corresponding to the size of the Oort cavity

produced when a star is formed in a protoglobularstarcluster PGC clump of dark matter planets, as shown in Figure 1.

The UIE (unidentified infrared events) have been identified as “condensations” of organic chemicals somehow emitted by the Nova stars. It is physically impossible for such complex organic chemicals to be produced, or survive, a Nova event, but it is easy to explain these observations from HGD cosmology. The black dots in the Fig. 1 represent the same evaporated planets that falsify dark energy in CC-cosmology by producing a systematic dimming error in supernovae Ia events. Identification of kerogen molecules in Nova spectra further falsifies the dark energy hypothesis.

4. Summary and Conclusions

Evidence of extraterrestrial life falsifies the hypothesis that the universe is expanding at an accelerating rate due to antigravity effects of a permanent dark energy Λ . It is impossible to deny that life exists on Earth. It is nearly impossible to deny that life would not exist on Earth without Hoyle/Wickramasinghe cometary panspermia. Combining cometary panspermia with HGD cosmology shows that life began in a biological big bang almost immediately after the cosmological big bang, and was spread homogeneously throughout the dark matter planet-clumps produced, taking with them genetic evidence of the same, and primordial, last universal common ancestor (LUCA) in every organism (Gibson, Wickramasinghe and Schild 2011). New telescopes, and now microscopes, can easily and precisely discriminate between predictions of the two cosmological models, which are very different. At some point the rising flood of evidence supporting HGD-cosmology and contradicting CC-cosmology and dark energy becomes overwhelming. That point may already have been passed.

6. References

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