

May 18, 2008

For immediate release: The Cosmic Challenge

Those of us with even a casual interest in astrophysics have noticed a pattern in recent years. It seems that every few months a new astronomical discovery is made that creates grave problems for the then-current astrophysical concepts. This pattern of continually back-tracking, undoing, and then attempting to completely re-do astrophysical theories is not entirely healthy, and suggests that there is something fundamentally wrong with at least a portion of the most basic conceptual framework.

It may be an interesting intellectual exercise to build idea-upon-idea without a solid touchstone of reality, but such exercises must be considered as art and fantasy rather than science. Art and fantasy do indeed have an important role in the human experience, but a healthy process of scholarship must keep these things separated from what is properly termed "science". In hopes that legitimate astrophysical progress may actually be made, I propose a very simple first step: all astrophysical theories about the universe must contain within them at least a plausible accounting of the most accurately observed bodies; specifically, the bodies of our solar system. Demanding that an astrophysical theory contains a preamble that accounts for our solar system would serve as a basic criteria to determine whether an astrophysical concept should be categorized as art or whether it can legitimately be considered as science.

To encourage that this touchstone-of-reality-criteria becomes mandatory in astrophysical science, I offer the following: \$10,000 to the first person who makes a plausible case for the properties of our solar system within the paradigm of a NON-GEOCENTRIC SYSTEM using no more than three variables. Accounting would need to be made not only for the various orbits, but also for the other measurable quantities such as polar and equatorial radii, tilt, spin rate, density, and temperature; as well as the geographical particularities of the various planets (at least a summary accounting would also need to be made for the planetary moons). An example of three variables would be (1) Matter, (2) Force A, (3) Force B. For instance, a modified Big Bang concept could include (1) matter, (2) explosion, and (3) some other variable.

A reconciliation of the motional velocities of the solar system bodies with that of the observed movements of the stars in the arms of a spiral galaxy would also need to be proposed, without resorting to non-observed conceptual factors such as "missing mass" or "dark energy".

All that is asked for this award is plausibility, rather than proof. It is impossible to scientifically "prove" whether an astrophysical theory is actually correct, simply because we can not fit the universe into an experimental test tube, nor can we be certain that physical observational data will continue to match a mathematical proof at such a time in the future when we may more accurately measure an astronomical feature. Moreover, this \$10,000 reward is offered only to those writing within the context of a non-geocentric system. This exclusion is made because there has already been presented a

geocentric paradigm that has matched these criteria of (a) plausibility, and (b) no more than three variables.

If a non-geocentric system matches these criteria and the author of the paper accepts the \$10,000, then I reserve the right to edit the paper for legibility and to make the printing of the first 10,000 copies.

Good luck on your venture!

Gregory Groebner

May 18, 2009: The amount has been raised to \$30,000 and 30,000 copies.

May 18, 2013: An additional \$20,000 (with 20,000 more copies) is offered.

May 18, 2016: Since this challenge was issued in 2008, no one has made a serious claim to meeting the terms of “The Cosmic Challenge”. Specifically, as stated above, proof was not a requirement, but plausibility is. Most potential challengers dealt only with orbits; which, while a prerequisite, shed no light on axial inclination, radial dimensions, density, and other physical properties of solar system bodies, as requested in the Challenge. The idea behind the Challenge is to find a simple model that would be a workable explanation of solar system formation – rather than a 17th century explanation of orbits. Consistent orbits are a prerequisite, but not the sole property of the solar system. A workable model of solar system properties would be a great accomplishment, very much worthy of a \$50,000 prize and publishing.

The Cosmic Challenge also mentioned that a geocentric model meeting these requirements had been found. It should be clarified that this model is “geo-centric” and not necessarily “geo-static”, as most readers of the Challenge have assumed. More specifically, the model is actually “near geo-centric”. This solar system model does have implications on larger cosmic models, in that the orbital movements of the arms of spiral galaxies are made consistent with the observations of our own solar system bodies, without any need for so-called “missing mass”. Axial rotations and inclinations, and some other properties are also incorporated into this model.

The money in the bank account for The Cosmic Challenge has been sitting there long enough, losing value over time, without any serious attempts made to claim it. It will now be used for another purpose of more immediate need. The Cosmic Challenge is closed.

May 18, 2017: The Cosmic Challenge reinstated at \$50,000, but is now in a less liquid form than in prior years (meaning that any claimant will have to wait for some extended period of time for payment upon successfully meeting the Challenge).