### A Few Things You Need to Know to Tell if a Nobel Laureate is Talking Nonsense

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#### FOREWORD

People so often place their trust in the word of an Authority that they don't carefully think about what they have been told. Consequently, that when upon a little reflection is recognised as utter fantasy, is passively accepted as true on the word of an Authority. Perhaps physics is the most pitiful example of the word of dogmatic Authority carrying sway over rational thought. Presented here are a few simple examples of the nonsensical claims made by physicists that reveal just how decrepit they and their science have become, and by which, hopefully, remedy is secured for the pensive reader.

### 1. Infinite Gravity

In Einstein's General Theory of Relativity gravity is not a force, because it is spacetime curvature induced by the presence of matter. According to the physicists the finite mass of their black hole is concentrated at its 'singularity'.

"A nonrotating black hole has a particularly simple structure. At the center is the singularity, a point of zero volume and infinite density where all of the black hole's mass is located. Spacetime is infinitely curved at the singularity. . . The black hole's singularity. It is not a mathematical artifact . . ." [1]

However, no finite mass can produce infinite gravity anywhere.

#### 2. Infinite Density

"... there must be a singularity of infinite density, within the black hole." [2]

Density D is defined in physics as mass M divided by the volume V of the mass. Then according to [1] above,

$$D = \frac{M}{V} = \frac{M}{0} = \infty$$

But division by zero is undefined, and  $\infty$  (infinity) is not even a real number. Not only do the physicists violate elementary mathematics, they also violate elementary physics since no finite mass can have zero volume and infinite density anywhere.

In the so-called 'Schwarzschild solution',  $g_{11} = -1/g_{00}$ . According to Nobel Laureate Paul Dirac [3], the 'Schwarzschild solution',

"becomes singular at r = 2m, because then  $g_{00} = 0$  and  $g_{11} = -\infty$ ."

Thus, Dirac also claims that,

$$g_{11} = -\frac{1}{0} = -\infty$$

No it doesn't.

### 3. Near Infinite

"One crucial assumption underlies the standard hot big-bang model: that the universe began' in a state of rapid expansion from a very nearly homogeneous, isotropic condition of infinite (or near infinite) density and pressure." [4] First, just as no physical object can have infinite density, nothing physical can possess infinite pressure. Second, just how close to infinite is *near infinite*? Near infinite pressure and density is just plain nonsense.

# 4. Infinite Hotness of Nothingness

"At the big bang itself, the universe is thought to have had zero size, and to have been infinitely hot." [5]

A physical entity must be present to render a temperature; for example. solid, liquid or gas. That which has size' 'zero cannot possess a temperature, bearing in mind that hotness is quantified by means of temperature of a material thing. Furthermore, no physical entity can have an infinite temperature. Consider a gas for example – just how fast must its particles be moving for it to have an infinite temperature? There is no such thing as infinite temperature and hence no such thing as infinite hotness, let alone infinite hotness of nothingness.

## 5. To Have and Not to Have

The physicists assert that their black holes have and do not have an escape speed simultaneously at the same place (at their black hole 'event horizon').

A black hole is, ah, a massive object, and it's something which is so massive that light can't even escape. ... some objects are so massive that the escape speed is basically the speed of light and therefore not even light escapes. ... so black holes themselves are, are basically inert, massive and nothing escapes. [6]

Since light travels at the speed of light and the speed of light is the escape speed, then, by definition of escape speed, light must escape! Nonetheless, according to Nobel Laureate Gerardus 't Hooft [7, 8],

"The 'astronomical black holes' exhibit no clash whatsoever with other physical laws."

However, this is patently false because nothing can have and not have an escape speed simultaneously at the same place. So their black hole does in fact clash with the laws of physics.

## 6. The Lesson Learned

Heed not the word of Authority for therein lurks inscrutable mysticism and irrational imagination. Think carefully about the claims made by 'experts' instead of blithely submitting to their doctrines and rites, lest your purse be deftly swindled.

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