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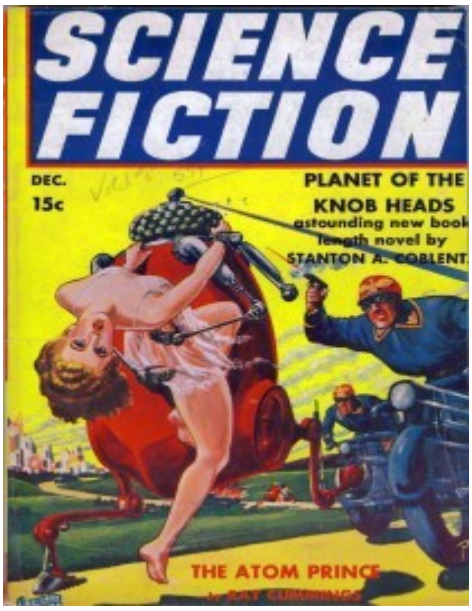
NEW PHYSICS

dies an ignominious death



by Miles Mathis

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I will scrutinize two recent stories from *New Scientist*, to show the current state of the art in physics.

In the first article, from March 26, we get a story from Lisa Grossman on "gravity-less black holes." Samuel Braunstein and team at the University of York recently

modelled a minimal black hole, defined only by having an inside and an outside, using quantum theory. To their surprise, they found that this object reproduces a lot of the features of real black holes that are thought to rely on gravity, including Hawking radiation, which could occur via a process called quantum tunnelling.

Not only is Braunstein surprised to find his gravityless black hole acting like a "real" black hole, he is pleased that it seems to sidestep the "firewall paradox" invented last year. Those of you who actually subscribe to any of these magazines will remember Joe Polchinski's model from 2012 that showed a ring of fire being formed outside the event horizon, burning up anyone falling into the black hole. In Braunstein's model, the ring of fire doesn't appear until after the black hole has shrunk down to near a singularity, which means passing astronauts need have no fear.

I am embarrassed at having my eyeballs sullied by such nonsense, so my question is why Lisa Grossman is not too embarrassed to write it, *New Scientist* is not too embarrassed to publish it, their

readers are not too embarrassed to admit reading it, and these modellers are not too embarrassed to model it? Do they really imagine that anyone is impressed by this "science"? Even teenage fans of Robert Heinlein or Anne McCaffrey must be too savvy to mistake this for real science, so we wonder who they think their readership is.

Just to be clear, the black hole is a theoretical entity that came directly out of the gravity field equations. It did not come from data. It was the solution to no real astronomical problem. It was just some guys playing with numbers about 80 years ago. They assumed Einstein's field equations were perfect, they pushed them this way and that, and one way they pushed them led to the possibility of a black hole. However, since I have shown that Einstein's field equations were far from perfect, this was nothing more than a game of math. The equations contained some discontinuities (to put it kindly), and these discontinuities led to mathematical abnormalities like zeros and infinities in strange places. The theorists preferred to theorize that these abnormalities were real physical entities, but a far more logical assumption would have been to treat them as signs of mathematical weakness—which is what they were. In other words, the abnormalities were signs of mistakes in the math. They were not signs of abnormalities in space.

But even if that were not true, modelling gravity-less black holes must be seen as a sign of madness. That would be somewhat like modelling heatless fire or heightless mountains or waterless oceans. The black hole was spawned from the gravity equations and would not exist in the math without those equations. So modelling a black hole without the equations is just to admit the equations are junk.

That is what this new gravity-less model should be telling us, although of course no one goes there. If you can get the same old Hawking radiation and quantum tunnelling and firewalls without gravity, then that is just proof you can manufacture them from anything or nothing. Historically, that is precisely what happened. All the theorists pulled their ideas right out of the vacuum, with no mathematical or physical backup in the least. Since Hawking radiation has no basis in the field equations of Einstein or any other field equations, of course it can be recreated from just a model "of an inside and an outside." Likewise with quantum tunneling, which was not theorized from any equations, good or bad. It was just invented to give physicists something to talk about.

Notice the imprecise wording in the quote above, which I have put in quotation marks. They say the minimal black hole is not like a "real" black hole. But that is propaganda. There are no real black holes. There are the old black holes, which are theoretical entities based on gravity field equations; and there are now the new minimal black holes, which are theoretical entities based on quantum equations. But neither is more real than the other. They are both just places where physicists can hide out to avoid having to address real physical problems.

It may be they came up with new quantum black holes *just so* they could say that the old black holes are real. "We have been telling stories about gravitational black holes for many decades, so they must be real!" They use this ploy in politics all the time, where they claim a story has been confirmed because it was published in the *New York Times*. "Stephen Hawking confirmed the existence of black holes, it was published in *Nature*, and he was given a prize for it, so it must be true!" Such naivete. It may surprise those who say this to find out that many people have been given prizes for things that are false. In fact, a close study of history would undoubtedly show that *most* ideas people have been given prizes for are false. Since the vast majority of ideas in history are known to be wrong, and since prizes are given for pretty much everything, we may deduce that prizes—like reportage and personal confirmations—are meaningless.

These modellers are no longer physicists, since they have no connection to the physical. We no longer have physics, we just have a long line of modellers, each commenting on a previous model. Sam models a variation of Joe's model, and Joe models a variation of Jenny's model, and Jenny models a variation of Bobby's model, and so on. My question is, why don't any of these people do some real physics? How is it that so many physicists are paid to model ridiculous stuff like this? They will tell you that Hawking was right: physics is over and they have nothing else to do but play these mind games, sitting on the edge of black holes or the edge of the universe and pushing equations and models. But my readers know that isn't so. I have shown that the given answers for almost everything are wrong, even the simplest things. I have shown that most physical answers are nothing but fudged math and bluster. But if you are physicist, you aren't allowed to study these problems, to try to correct them or improve them. That would be impertinent. Instead, you are encouraged to theorize on problems we don't have: problems on the first 3 seconds of creation or the interior of a black hole. I shouldn't have to point this out, but those are problems that just don't come up—unless you are trying very hard to avoid real problems. As problems go, they are extremely low priority. So why are they so prominent? Why are they on all the covers of the magazines? Why have they dominated theoretical discussions for half a century or more? Misdirection. You are being misdirected away from the realization that physics has no good answers for much simpler questions. You are being diverted into esoteric problems to prevent you from looking closer to home.

But let's move on. On April 3, Maggie McKee reported in *New Scientist* on the non-confirmation of "dark flow" from the PLANCK probe. This is another non-story, which we could tell just based on the nature of dark flow. What is dark flow? Dark flow is a theory from 2008 from NASA and Alexander Kashlinsky, who found anomalies in WMAP that he used to propose a confirmation of multiverses. Because galaxy clusters appeared to moving toward a certain region, with an energy unexplainable by current physics,

> This flow suggested that the universe had somehow become lopsided, as if space-time itself was behaving like a tilted table and matter was sliding off, says Kashlinsky. That goes against the standard model of cosmology, which says that the universe is increasingly uniform on larger scales, making it unlikely that structures big enough to produce such a tilt would form. Some researchers suggested that, instead, other universes could be pulling on matter in ours, creating the flow.

Although many working physicists and astronomers had the sense to dismiss this suggestion from the start, the idea was not immediately killed on its obvious lack of merit. Even this latest article from *New Scientist*, which calls the PLANCK cosmic map "a blow" against the theory, still manages to prop the theory up nonetheless. Although the theory was a non-starter from the beginning, based on simple logic, physics is corrupt enough to have given it a lifespan of over 4 years now. We have had to read about in many publications, where it has been given serious attention. And now, *New Scientist* refuses to kill it outright, although it never had the least life in it. Maggie McKee hedges again and again, telling us that dark flow is not ruled out, that we shouldn't wash out the baby with the bathwater, and that Kashlinsky will be back in a few months to push his reading of PLANCK back toward his dark flow theory. No doubt *New Scientist* and many other publications will be there to report on his pushes, since that is what they do. They don't report any solid physics, since we haven't had any of that for decades. They just publish all the most absurd theories, the more absurd the better.

These two stories are not the exception, they are the rule. All of new physics reads like this, and has for many decades—though getting worse with each passing decade. Mainstream journals are not interested in real physics or real problems. They are only interested in the sexiest *avant garde* theories. And this applies to the professional journals as well. You can no longer get any funding or publicity for

a project unless you tie it to the most esoteric, cutting-edge theories. Mechanics and straightforward physical math are dead: neither you nor I has seen the slightest whiff of old-style mechanics, kinematics, or sensible math in any physical journal in over fifty years, since there hasn't been any. New physics is nothing more than a flight of fancy, a flight that takes place inside a computer model and inside a bloated mathematical system of one sort or another. Any slightest connection to reality, data, experiment, or sense was cut long ago.

How can physics exist in this state at all? What is in it for the physicist or the audience? Can any self-respect be maintained in such a field? Can these physicists really continue to convince themselves that they are doing physics? Can the writers convince themselves they are writing about physics? And can the audience be maintained with such paper-thin reports—ones that make no sense? Who can read such articles and honestly believe they are reading about physics or science? The readership for hard science would have been small to begin with. Is it possible that the journals have maintained their readership with such stories?

Which brings us to the answer to all these questions: the magazines have replaced one readership with another. The audience for real science was always too small. It provided too little advertising revenue. So although the magazines did indeed lose real scientists and real thinkers when they changed course, they more than made up for those losses with gains from the next lower percentiles. What they lost from the science crowd, they gained from the science fiction crowd, which is far larger. Just as the producers of television figured out that the lower percentiles you appealed to, the greater your profit—since those percentiles are where the biggest numbers are—the magazines finally followed suit. Some of the magazines started at the bottom and didn't have to fall, but the science magazines have had to fall off a cliff to reach their current state. I doubt they even appeal to science fiction readers anymore, since science fiction readers have some remaining levels of sense—or it is to be hoped. Science fiction readers expect their plots to be believable, or at least consistent. They don't put up with gaping holes in the story. If big mistakes are made in *Star Trek* or *Star Wars*, or even *Planet of the Apes*, they swamp the online forums with complaints. But we see almost no online complaints against mainstream physics—except mine—so we must assume that the mainstream science journals are not above the science fiction readers and watchers. . . they are beneath them. Science fiction readers can't be bothered to keep up with mainstream science, since they know that mainstream science has long been playing catch-up to mainstream science fiction. For science fiction readers, mainstream science is just science fiction from bad writers.