Jason Sharples,

The mathematics associated with black holes and big bangs is quite trivial, but to the non-mathematical reader incomprehensible and so the claims made for black holes are taken on trust by the non-mathematical reader, be they practicing scientists or interested layman alike, misplacing their trust in the mathematician. Such mathematical mumbo-jumbo amounts to an obfuscation of the facts and so I have written a number of papers that downplay the mathematics and amplify the salient theoretical factors so that the non-mathematical reader can comprehend the crucial arguments. Your continued insistence on mathematical obscuration does nothing to educate and does great disservice to science, misleads the non-mathematician, and amounts to obscurantism. This is a common practice amongst theoreticians, who thereby think themselves smarter than the average bear because they can do sums. But contrary to their apparent wishes they do not have a monopoly on doing sums. In any event my development of 3-dimensional spherically symmetric metric manifolds is correct and so I again refer you and all mathematically inclined readers to my relevant paper for all the details, and the references contained therein which should be followed up; the link being given in my previous post and repeated here for convenience:

www.ptep-online.com/index_files/2007/PP-09-14.PDF

I reiterate that almost the entire body of mathematical gymnastics associated with black holes and big bangs can be avoided by appealing to the physical principles underlying the General Theory of Relativity, principles which are not difficult to understand at all. I gave some arguments of a theoretical nature in my previous post by which it was made clear that black holes and big bangs are nonsense. You again chose to ignore those arguments, after falsely asserting that I have not dealt with theory in my work. And so I will give some of the theoretical arguments again, thus: according to Einstein and his followers his Principle of Equivalence and his Special Relativity must manifest in sufficiently small regions of his gravitational field and that these regions can be located anywhere in his gravitational field. Both the Principle of Equivalence and Special Relativity are defined in terms of the a priori presence of multiple arbitrarily large finite masses and photons. Therefore neither the Principle of Equivalence nor Special Relativity can manifest in a spacetime that is alleged, by construction, to contain no matter. Now $Ric = R_{uv} = 0$ is a spacetime that by construction contains no matter, according to Einstein and his followers. Therefore $Ric = 0$ violates the physical foundations of the General Theory of Relativity and so is inadmissible. It is from a "solution" for $Ric = 0$ that the black hole was spawned, via Hilbert's corruption of Schwarzschild's actual solution.

The upshot of this is that Einstein's field equations violate the usual conservation of energy and so are in conflict with experiment on a deep level. To see this I must resort to some simple mathematical symbolism. Since $Ric = 0$ is inadmissible the field equations must take the following form:

$$G_{uv}/k + T_{uv} = 0,$$

where the G_{uv}/k are the components of a gravitational energy tensor and k is a constant. The T_{uv} constitute the energy-momentum tensor describing the matter causing the gravitational field and G_{uv} is the Einstein tensor, describing the geometry of spacetime. This expression cannot reduce to $Ric = 0$ when $T_{uv} = 0$ since $Ric = 0$ is

inadmissible for the reasons given above. The above field equations therefore form an identity with zero. It is plainly evident now that the total gravitational energy is always zero and that the Einstein tensor and the energy-momentum tensor must vanish identically! It also follows that gravitational energy cannot be localised, i.e. there are no Einstein gravitational waves. It is therefore not surprising that in more than 40 years of effort to detect these waves none have been found. The search for them is destined to detect none. Finally, and most importantly, the above field equations violate the usual conservation of energy and are therefore in fatal conflict with the experimental evidence. I reiterate also that in an attempt to save his theory from this catastrophe Einstein invented his pseudo-tensor. His invention is nonsense because his pseudo-tensor implies the existence of an invariant that is composed solely of the components of the metric tensor and their first derivatives. One does not even need to know what a metric tensor is in order to see that his pseudo-tensor is a meaningless concoction of mathematical symbols because it was proven in 1900 by the pure mathematicians G. Ricci-Curbastro and T. Levi-Civita, inventors of the tensor calculus, that invariants such as that generated from Einstein's pseudo-tensor do not exist! That is sufficient to render Einstein's pseudo-tensor, by reductio ad absurdum, and all that rely upon it, just plain nonsense. It is also sufficient to render black holes and big bangs nonsense and all your mathematical arguments in support of black holes quite superfluous and futile. It also amplifies the fact that numerical methods applied to General Relativity do not deal with any well-posed problem and so are meaningless. I again refer you and non-mathematical readers to my recent paper:

www.sjcrothers.plasmaresources.com/BB.pdf

wherein I have quoted widely from the literature so that there can be no doubt whatsoever as to what Einstein and his followers assert and the fatal contradictions inherent in those claims. Most of the mathematics in the above paper has been relegated to appendices so that the theoretical issues are not indelibly disguised in mathematical symbols.

Another example of the misapplication of numerical and perturbative methods to General Relativity is the linearisation of the field equations. Proponents of black holes and big bangs and Einstein gravitational waves etc. write down linearised field equations and proceed as if the linearised form is meaningful. They blissfully deduce all sorts of things from the linearised form. But linearisation of the field equations is inadmissible because linearisation implies the existence of a tensor that except for the trivial case of being precisely zero, does not otherwise exist! An analogous proof was similarly given concerning Birkhoff's linear theory by the celebrated German mathematician Hermann Weyl, in 1944. Here is Weyl's paper:

www.sjcrothers.plasmaresources.com/weyl-1.pdf

In the past I have given to those who vilify me various recipes to prove me a mug and themselves smart. None have offered any attempt to follow the recipes, simply calling me a crank or crackpot, mostly under the anonymity of the internet, as occasioned on this very site. I will give you such a recipe. Mr. Bridgman is also invited to participate.

Please provide the following:

1. A proof that the Principle of Equivalence and Special Relativity can manifest in a

spacetime that by construction contains no matter, namely, the spacetime Ric = 0.

2. A proof that Einstein's pseudo-tensor is not a meaningless concoction of mathematical symbols.

S. J. Crothers