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## How a Tiny Little New Result Can Save the World – A Tribute to John Wheeler

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### Abstract

The general theory of relativity becomes the new leading science. Johnny Wheeler's favorite slogan, "make an estimate first, then calculate," has consequences for the LHC experiment at CERN. Ten new results are presented.

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A new "Einstein gedanken experiment" entails consequences of its own – the "frictionless twin paradox." In this modified version of the famous twin clocks paradox, two equally fast rotating frictionless wheels are used for the two clocks envisaged by Einstein in 1905: one stationary, the other sent away and returned. The inviolate law of angular momentum conservation implies a new prediction in this case: a change of mass and size along the voyage. For without such a change along the way, the returned wheel could not possibly sport the deficient rotation number found by Einstein. The same phenomenon holds true in the "gravitational twin clocks paradox": Here the twin wheel dispatched downstairs does not only rotate more slowly all the time but also sports a redshift-proportional mass decrease and size increase if angular momentum is conserved throughout as unavoidable. Quantum mechanics makes the same prediction independently (Marmet-Kuypers phenomenon).

℞ Theorem: All local distances around a gravitationally redshifted body are, like the body itself, enlarged in proportion to the local red shift factor. The famous "Clifford-Einstein space curvature" hence gets complemented by an "Einstein space stretching."

Corollary: The spatial and temporal distance toward and away from the horizon of a Wheeler black hole is infinite. (Previously this was only known for the temporal distance using light.)

Remark: The short finite proper in-falling time into a stellar black hole (Oppenheimer and Snyder 1939) – with an equal proper rebounding time from the horizon if feasible – is based on an infinite clock slow-down in the free-falling body. This is just the most extremal case of the gravitational twin clocks paradox. The seemingly finite distance is a mirage since *any* infinite distance can be covered in finite time with an infinitely slowed clock.

Summary: The *gothic-R theorem* of the Schwarzschild metric ([www.wissensnavigator.com/documents/Chaos.pdf](http://www.wissensnavigator.com/documents/Chaos.pdf)) describes physical reality.

The new situation in general relativity entails 10 consequences:

1) Theorem 1: Notwithstanding the famous Gauss-Stokes theorem, black holes are *uncharged*.

Proof: The infinite reduction in rest mass of any infalling elementary particle, valid at the horizon (Cox), goes hand in hand with an equal reduction in the particle's charge since both remain interconvertible locally by virtue of Einstein's principle of general covariance.

Conjecture: If charge were independent of the gravitational potential, as so far erroneously assumed in the Reissner-Nordström metric, a "perpetual-motion machine for charge generation" could be built.

- 2) Corollary 1: Mini-black holes can be manipulated, neither through electrical nor through magnetic influences. Hence they can be employed, neither for the purpose of energy production (Horst Stöcker) nor as a weapon.
- 3) Theorem 2: Charged leptons cannot be maximally compact since they would be uncharged in this case. (This is the first empirical confirmation of *string theory*.)
- 4) Corollary 2: The increased size of charged particles increases the probability of mini-black holes arising in the LHC, to about 1 part in 6 if all orders of magnitude count equally as needs to be assumed for lack of better knowledge.
- 5) Theorem 3: Hawking radiation is both infinitely delayed and infinitely weakened, that is *nonexistent*.
- 6) Corollary 3a: Any LHC-generated mini-black hole thereby loses its currently expected “signature“ in the detectors of the LHC machine. Therefore, their successful production will likely go unnoticed for weeks or months in a row.
- 7) Corollary 3b: Ultra-fast natural mini-black holes will, owing to their lack of charge, *not* get stuck inside matter – except for the densest celestial bodies, neutron stars.
- 8) Coincidence 1: An independent result from quantum mechanics eliminates the pertinent “safety argument“ of CERN’s: Neutron stars happen to be protected by their quantum superfluidity from exerting any friction-like resistance on impinging ultra-fast uncharged mini-particles like fast natural mini-black holes. Hence the empirical persistence of neutron stars does *not* represent a security argument regarding the hoped-for production of ultra-slow mini-black holes in the LHC. (Robert Laughlin and Rolf Landua concurred.)
- 9) Coincidence 2: An independent result from chaos theory eliminates the second “safety argument“ maintained by CERN: Earth-dwelling ultra-slow mini-black holes generated by the LHC do not grow linearly as CERN claims but rather *exponentially*: “Mini-quasar formation.“
- 10) Theorem 4: The sun will likewise be wiped out in a short time if ultra-slow miniblack holes are successfully generated in the LHC. Hence *all* life forms in the solar system would get extinguished.

I am at a loss about the right strategy to get reassured. If the planned final LHC energy of 8 times the previous RHIC level has a 1/6 chance to destroy the planet as demonstrated above, then by next week ten percent of this potential will be accomplished by virtue of the most recent announcement of CERN and in 6 weeks it will be 50 percent and in three months 70 percent. But it is the beginning that counts. Would you allow a cable firm into your house that does not dispute such collaterals? One high-ranking person on the planet should speak up and demand an immediate moratorium until Director-General Rolf Heuer has justified his decision to ignore the above results.

I apologize for having found results in the footsteps of Einstein that for once would have a beneficial effect. John Wheeler helped build the bomb but remained meek in his soul. Einstein never overcame his guilt. Now there is a chance to return to innocence thanks to both. Should we not seize it?

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