

On General Relativity and Gravitomagnetism

Open letter to the ones who mix-up General Relativity and Gravitomagnetism in their papers.

Dear PhD,

We would like to draw your attention on the following.

When one talks of "gravitomagnetism", this is the theory of Oliver Heaviside which he published in 1893, and it is the Maxwell-analogy for gravity.

However, it is known that the general relativity theory is based upon a totally different set of premises than gravitomagnetism. Also, it is known that the relativistic effects from the general relativity theory are not applicable to the Heaviside gravity fields, in which only the retardation of the fields due to the finite speed of light has to be taken into account.

The general relativity theory uses a non-linear, intrinsic variable space and time with the velocity, while gravitomagnetism uses an Euclidean space without an intrinsic space and time variation with velocity. Many other fundamental issues differ as well.

Needless to say that we are quite disappointed about the mixing up of the different theories in many places in the literature and on the Internet.

If the general relativity theory is correct, it should suffice to use it to demonstrate whatever issue has to be analyzed.

If the Heaviside gravity fields theory is correct, the calculus of each issue should be done by it.

But what is too often seen, is that some scientist use, as it suits them best, the Maxwell-analogy, the Post-Newtonian formulation, or the relativity theory.

One claims about Oliver Heaviside that he wasn't able to prove the missing perihelion advance of Mercury. The relevance is poor, because Heaviside wasn't aware of the speed of the Sun in the Milky Way, and he had no data of our galaxy. In the mean time, it has been proven that the missing perihelion advance of Mercury is due to the magnetic field of the Sun in the Milky Way, causing an anisotropic extra attraction force of Mercury, accounting exactly for the missing value.

Moreover, Anatoli Vankov found that Einstein's deduction of the missing perihelion advance of Mercury was altered by approximations that were too important to be omitted. Due to that, the question arises if the required missing perihelion advance has been reached by the general relativity.

We are glad that gravitomagnetism (Maxwell-Analogy) is more and more recognized as a valid way to handle gravity issues. However, this theory is fundamentally different than the general relativity theory. So, we would insist, if one uses this theory of gravitomagnetism, one should also recognize

the validity of Heaviside's theory, not only when it suits one, but entirely.

From then on, it is however not possible of simultaneously accepting the general relativity theory and one should make the reader aware of that.

We remain at your disposal to provide you the references of the claims we made in this e-mail, and we hope that your insights will evolve accordingly.

With kind regards,

Thierry De Mees
Editor, The General Science Journal