IS G REALLY CONSTANT?

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A. Held

Institute for Theoretische Physics

University of Bern

The question of whether or not G might perhaps be a function of

time dates back at least to a paper of 1937 by Dirac. Since then the debate while not actually raging, has at least never completely died out. The purpose of this note is to lay the question for once and for all to rest with a proof that G is not constant, but rather is increasing with time.

I find that I have now lived sufficiently long so that the \delta t to which I have now been exposed allows me to experience 2nd order effects which in turn allow me to establish the following two facts - proving incontrovertably that G has increased since I was young.

The first proof is based on climbing stairs. There is no question that over the years it has become much more difficult to do this. I am sure that anyone who has a \delta t of over 50 yrs. will substantiate this observation, however I seem to be the first one to discover the cause.

The second proof has been equally available over the years, but again no one has identified the effect with its true source, the increase of G with time. I realize that most readers of a certain age will be amazed that the thought has never occurred to them.

There is no question that I have gotten heavier within the last few years!

I realize that this is not a direct proof, but by the same principle that allows the binary pulsar obsevarvations to establish the existence of gravitational radiation, namely, `what else could it be?', I ascribe the effect to the increase in G.

Discussion and Conclusion:

G is increasing with time.

Reference:

Dirac, P. A. M., 1937, Nature 139, 323

Editor's note: The referee of this paper, Prof. C. J. Isham has stated his willingness to forego his anonymity in order to have his name appear in this seminal paper. He adds further evidence to support the claim by pointing out that in his travels over the years he has continually packed less, but that his suitcase has none-the-less consistantly become heavier.