Juan Joaquín Schulz Poquet <jjschulzpoquet@gmail.com> 20 de diciembre de 2009 18:39
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Dear Sirs,

I am writing to bring your attention upon an astronomical test -and the possibility to perform it- to probe the second postulate of the SpecialTheory of Relativity (that of the lightspeed constancy) in a direct way.

As you well know, Bradley discovered the Stellar Aberration phenomenon, and he understood it as a composition of speeds: the one of the becoming light from a star ("c") with that of the Earth on its way around the Sun ("v"), resulting at that time a definitive back-up for the heliocentric theory. The expression for this aberration is the angle A necesary to tilt a telescope to focalize a certain star in respect to its actual position, and in its simplest expression (without considering the star's declination) is such so that tg A = v/c , understanding that 20.48" is the maximum value generally accepted for A.

Well, let's now suppose that "c" could vary. In this case so would A. This fact conducted me to imagine a direct test for the mentioned postulate, based on accurate measurements of the relative positions in the sky of specified celestial bodies (carefully selected to fulfill requirements of brightness,apparent proximity and quite different radial velocities) during, at least, six months, in order to detect eventual changes in its relative positions. The test could be reduced to the simple lecture of available photographic registers, if this would be the case, and would yield a positive or negative result if changes about 0.05" could be detected, or even a lot less, considering the ultrasensibility of the present Astrometry.

But I am an Industrial Engineer, and this analysis (selection of the adequate sector of the sky and lecture of the registers) is to be done by professional Astronomers, experienced in Astrometry. In a pdf document attached to this e-mail you will find the basis of this test, which I published in APEIRON in April 2005 under the title "An

Astronomical Test for the Second Postulate of the Theory of Relativity".

I must emphasize that a null result of this test ought to be considered scientific news, as it happened in their times with the Michelson-Morley's experiment. And, of course, a positive one would certainly have a huge transcendency. In my quoted publication I detail the reasons that support my conviction that up to date no direct proof has been obtained for the mentioned postulate, and why I think this test would effectively be one.

I would very much appreciate your response, and would like to welcome any suggestion or advice.
Apologizing for my bad English, I remain yours,
sincerely

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