

Re: An Explanation of Dayton Miller's Anomalous "Ether Drift" Result

Source: <http://sci.tech-archive.net/Archive/sci.physics.relativity/2006-08/msg02393.html>

- *From:* "Harry" <harald.vanlintel@xxxxxxx>
 - *Date:* Tue, 29 Aug 2006 11:59:46 +0200
-

"Tom Roberts" <tjroberts137@xxxxxxxxxxxxxxxx> wrote in message
[news:SfFIg.12605\\$1f6.2298@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:SfFIg.12605$1f6.2298@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx)
SNIP

Similarly, suggesting

<< It is convenient to take advantage of the 180 degree symmetry of the apparatus, and combine the data for markers 180 degrees apart. This gives 8 orientations, and 8 independent measurements of differences in systematic(time), shown in Fig. 10 >>,

you proceed from the idea that Miller had to obtain ideal characteristics. Factually such symmetry is basically impossible,

Not really. The 180 degree symmetry is precise to within a few wavelengths of light — this is necessary for the fringes to be visible with the central fringe near the image of the pointer. This is far more accurate than necessary for this combination of points 180 degrees apart. For instance, the effect due to the rotation of the earth is VASTLY larger, but is also negligible (footnote 7 on page 6).

Tom, I just started reading your draft paper.

According to Munera in a later, refined publication, the signal can even change considerably in the time of making one turn. If so, your above statement is simply wrong.

Consequently, your statement in the footnote that "every one [of these dissident authors] ignores the huge systematic drift" is also erroneous. I'll try to find time to study the rest of your paper.

Regards,
Harald