

Re: Preferred frame of reference

Source: <http://sci.tech-archive.net/Archive/sci.physics/2004-06/2395.html>

From: Perfectly Innocent (*perfectlyInnocent_at_as-if.com*)

Date: 06/07/04

Date: 7 Jun 2004 12:34:50 -0700

Bjoern Feuerbacher <feuerbac@thphys.uni-heidelberg.de> wrote in message news:<ca1uq5\$afa\$2@news.urz.uni-heidelberg.de>...

> *Perfectly Innocent* wrote:

>> Bjoern Feuerbacher <feuerbac@thphys.uni-heidelberg.de> wrote in message news:<c9pj9k\$131\$1@news.urz.uni-heidelberg.de>...

>>

>>> Nevertheless, GR **also** has a principle of relativity, which **can**
>>> be still applied even in non-flat spaces – and that shows quite clearly
>>> that still no frame of reference is preferred (in the sense in which
>>> one originally meant "preferred frame" – i.e. the laws of nature in it
>>> are somehow different).

>>

>> **Obviously** the principle of relativity for GR is only applicable
>> locally, not globally, so that tidbit is irrelevant. However, I see
>> the humor in declaring the laws of nature to be frame-independent and
>> then defining the laws of nature in a "preferred frame" to be frame
>> dependent.

>

> What on earth are you talking about???

Hi Bjoern,

I'm saying that your tidbit is irrelevant because the principle of relativity for GR is only applicable everywhere locally, not globally. My point is that absolute frames of reference can exist globally and be undetectable locally.

Here's a page that illustrates that statement with a practical example:

<http://www.everythingimportant.org/viewtopic.php?t=605>

Eugene Shubert

<http://www.everythingimportant.org>