

Re: Special Relativity is Dead! (Final Proof)

Source: <http://sci.tech--archive.net/Archive/sci.physics.relativity/2006-12/msg00210.html>

- *From:* "Paul B. Andersen" <paul.b.andersen@xxxxxxxxxxxxxxxxxx>
 - *Date:* Wed, 29 Nov 2006 10:47:37 +0100
-

Eric Gisse wrote:

Henri Wilson wrote:

On Mon, 27 Nov 2006 12:58:24 +0100, "Paul B. Andersen" <paul.b.andersen@xxxxxxxxxxxxxxxxxx> wrote:

Henri Wilson wrote:

On Sun, 26 Nov 2006 21:28:53 +0100, "Paul B. Andersen" <paul.b.andersen@xxxxxxxxxxxxxxxxxx> wrote:

Henri Wilson wrote:

On Thu, 23
Nov 2006
15:55:09
+0100,
"Paul B.
Andersen"
<paul.b.andersen@xxxxxxxxxxxxxxxxxx>
wrote:

Henri
Wilson
wrote:

On
Wed,
22
Nov
2006
10:45:34
+0100,

Re: Special Relativity is Dead! (Final Proof)

"Paul
B.
Andersen"
<paul.b.andersen@xxxxxxxxxxxxxxxxxx>
wrote:

Henri
Wilson
wrote:

On
Tue,
21
Nov
2006
13:40:24
+0100,
"Paul
B.
Andersen"
<paul.b.andersen@xxxxxxxxxxxxxxxxxx>
wrote:

Henri
Wilson
wrote:
[about
the
H&K
experiment]

You
don't
have
to
go
to
all
this
trouble.
As
soon
as
the
planes
carrying
the
clocks
are

in
the
air,
just
stop
the
Earth
from
rotating.
Somehow,
relativists
will
claim
that
this
action
will
affect
the
now
remote
clocks.
They
will
now
read
the
same
time
when
reunited.

I
would
like
your
answer
the
question
at
the
end
of
this
posting.

Two
supersonic
planes
are
flying

in
opposite
directions
around
the
Earth
along
equator.
The
ground
speed
is
one
Earth
circumference
per
sidereal
day
(ca.
1670
km/h,
MACH
1.36).
Each
plane
is
carrying
a
ring
laser
gyro
detecting
the
rotation
around
an
axis
parallel
to
the
Earth
axis
(the
pitch
axis).
The
planes
are
starting
at
a

point
at
the
Earth,
and
returning
to
the
same
point
one
sidereal
day
later.

Case
1:
The
experiment
is
performed
on
the
rotating
Earth.
How
many
rotations
are
measured
by
the
gyros
in
the
East-
and
West
going
plane
respectively?
(The
obvious
answer
is:
2
and
0)

Case
2:

The
experiment
is
performed
on
a
non-rotating
Earth.
How
many
rotations
are
measured
by
the
gyros
in
the
East-
and
West
going
plane
respectively?
(The
obvious
answer
is:
1
and
1)

Now
the
question
I
would
like
you
to
answer:
Do
you
claim
that
the
rotation
of
the
Earth
somehow

will
affect
remote
ring
laser
gyros?

THIS
HAS
NOUGHT
TO
DO
WITH
THE
QUESTION.

We
are
talking
about
clock
rates.

You
people
claim
the
two
clocks
will
run
at
different
rates
and
will
read
differently
when
reunited.

I'm
telling
you
that
if
the
Earth
stops
rotating
as

soon
as
the
clocks
are
in
the
air,
their
relative
rates
cannot
possibly
be
affected
and
they
should
still
read
differently
when
reunited
(according
to
your
silly
theory).

But,
since
their
whole
trip
is
carried
out
when
the
Earth
is
NOT
rotating,
they
obviously
should
NOT
read
differently
when
reunited.

Even
YOU
should
know
that
observer
behavior
cannot
affect
an
observed
object.

So
considering
that
observer
behaviour
cannot
affect
an
observed
object,
do
you
claim
that
the
rotation
of
the
Earth
somehow
will
affect
remote
ring
laser
gyros?

No
answer,
Henri?

We're
talking
about
clocks,
not

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ring
gyros.

Doesn't
matter.
Same
problem.
They
are
both
instruments
inside
the
planes.

So
we
could
make
the
question
more
general:
Do
you
claim
that
the
rotation
of
the
Earth
somehow
will
affect
instruments
inside
the
plane?

How
is
it
that
the
H&K
clocks
would
miraculously
know

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how
to
change
rates
if
the
(remote)
Earth
suddenly
stopped
rotating?

How
is
it
that
the
gyros
in
my
thought
experiment
would
miraculously
know
how
to
change
the
rotation
if
the
(remote)
Earth
suddenly
stopped
rotating?

The
answer
should
be
obvious,
Henri.
And
the
answer
is
the
same
whether

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we
are
talking
about
clocks
or
gyros.

I
will
give
you
a
hint:
What
is
it
the
gyros
measure?
Why
are
the
results
different
in
case
1
and
2?
What
is
the
relevance
of
the
Earth?

Paul, as
usual you
run away
from the
real topic
and stall for
time by
talking
about
something
entirely
irrelevant.

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IF THE
EARTH
STOPS
ROTATING
AS SOON
AS THE
PLANES
ARE IN
THE AIR,
HOW DO
THE
CLOCKS
'KNOW'
HOW TO
ADJUST
THEIR
RATES SO
THEY
WILL
NOW
READ THE
SAME
WHEN
REUNITED?

THIS
SHOWS
HOW
NOINSENSICAL
THE H&K
REALLY
IS.

WOULDN'T
YOU
AGREE?

IF THE EARTH STOPS
ROTATING AS SOON AS
THE PLANES ARE IN
THE AIR, HOW DO THE
GYROS 'KNOW' HOW TO
ADJUST THEIR
MEASUREMENTS SO
THEY WILL NOW READ
THE SAME WHEN
REUNITED?

Why don't you answer?

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Because the question is completely irrelevant.

Is it because you can't, or is it because you don't like the answer you would have to give?

I will answer you.

The gyros will tell each plane when it has done a complete 360 turn. It makes no difference whether the Earth stops spinning or not.

Of course. That is indeed the obvious answer. The gyros and the clocks give different results in the two scenarios, because the `_planes_` move in two very different ways in the two scenarios. As you so correctly point out, it does not matter if the Earth is spinning or not.

So the answers to your question:
" IF THE EARTH STOPS ROTATING AS SOON AS THE PLANES ARE IN THE AIR, HOW DO THE CLOCKS 'KNOW' HOW TO ADJUST THEIR RATES SO THEY WILL NOW READ THE SAME WHEN REUNITED?"

and my question:

"IF THE EARTH STOPS ROTATING AS SOON AS THE PLANES ARE IN THE AIR, HOW DO THE GYROS 'KNOW' HOW TO ADJUST THEIR MEASUREMENTS SO THEY WILL NOW READ THE SAME WHEN REUNITED?"

are exactly the same:

The clocks or the gyros don't have to know anything about the rotation of the Earth because it does not affect them in any way, it is the paths of the planes through space and time that determine what the instruments will show at the end of their journey.

In case 1, one plane is stationary in a non rotating frame, while the other plane is moving twice around a circle at the speed 3340 km/h.

In case 2, both planes are moving in opposite directions once around a circle at the same speed 1670 km/h.

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"It makes no difference whether the Earth stops spinning or not."

Remember that for the future.

Case closed.

The case is indeed closed.

You have agreed that the H&K MUST give a null result.

There is no possible way to interpret what Paul said to mean that.

Henri knows that very well.

This is only his way of diverting the attention from the fact that he himself, by pointing out that it is the motion of the _planes_ and not the rotation of the Earth that determines what instruments in the planes will show, demonstrated that his babble about stopping the rotation of the Earth is stupid.

Paul

.