

Re: Special Relativity is Dead! (Final Proof)

Source: <http://sci.tech-archive.net/Archive/sci.physics.relativity/2006-11/msg02319.html>

- *From:* "Paul B. Andersen" <paul.b.andersen@xxxxxxxxxxxxxxxxxxxx>
 - *Date:* Mon, 27 Nov 2006 12:58:24 +0100
-

Henri Wilson wrote:

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

Henri Wilson wrote:

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

Henri Wilson wrote:

On Wed, 22 Nov 2006
10:45:34 +0100, "Paul B.
Andersen"
<paul.b.andersen@xxxxxxxxxxxxxxxxxxxx>
wrote:

Henri
Wilson
wrote:

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

Re: Special Relativity is Dead! (Final Proof)

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

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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

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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.

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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

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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

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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

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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

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rotation of
the Earth
somehow
will affect
remote ring
laser gyros?

No answer, Henri?

We're talking about clocks,
not 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 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 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.

IF THE EARTH STOPS ROTATING AS SOON AS THE
PLANES ARE IN THE AIR, HOW DO THE

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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?

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

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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.

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

Remember that for the future.

Case closed.

Paul

.