

Re: Gyroscopes – Usenet Physics FAQ – Reference frames

Source: <http://sci.tech-archive.net/Archive/sci.physics.relativity/2004-08/0845.html>

From: crynwulf (lyttlec_at_earthlink.net)

Date: 08/03/04

Date: Tue, 03 Aug 2004 23:08:50 GMT

John Popelish wrote:

> *greywolf42* wrote:

>>

>> *"Myxococcus xanthus"* <mold-guardian@comcast.net> wrote in message

>> *news:ce5e7813.0408030119.77bb3b25@posting.google.com...*

>

>> > *The gyroscopic contribution to bicycle stability is relatively minor.*

>>

>> *As a teenager -- purely as a scientific experiment ;) -- I repeatedly*

>> *released an old bicycle to roll down a local hill. Except for the times*

>> *it*

>> *didn't make the turn, it stayed rolling for several hundred yards.*

>> *That's hardly minor.*

>

> *Good experiment, incorrect conclusion. Try locking the steering*

> *position to straight ahead and repeating the experiment. This does*

> *nothing to reduce the gyroscopic effects on balance, but eliminates*

> *any effect on steering. You might even try riding the bike and see if*

> *you can keep it from falling over without being able to steer.*

>

> --

> *John Popelish*

Try this. Hold the front wheel off the ground and get it spinning as fast as

you can. Twist on the handle bars. Feel the gyroscopic effect?

The reason the greywolfs bike stayed up wasn't because the gyroscopic effect

held it up, but because it caused the front wheel to turn to keep the

center of mass between the axles.

--

Russ Lyttle

Not Powered by ActiveX

<http://home.earthlink.net/~lyttlec/philosophy/logos.html>