

Re: invariance of negative signature of the metric?

Re: invariance of negative signature of the metric?

Source: <http://sci.tech-archive.net/Archive/sci.physics.relativity/2008-03/msg01175.html>

- *From:* stevendaryl3016@xxxxxxxxxx (Daryl McCullough)
 - *Date:* 12 Mar 2008 15:47:38 -0700
-

Ken S. Tucker says...

On Mar 12, 6:12 am, stevendaryl3016@xxxxxxxxxx (Daryl McCullough) wrote:

I'm sure that it's possible to work perfectly well with complex coordinates.

That's what a (+----) signature is.

No, it's not.

But the notion of a metric "signature" only makes sense if the coordinates are real.

I don't know what "makes sense" means, but I prefer to use a (++++) signature BUT that's choice not a physical law of nature.

But the claim that spacetime has the metric (+----) (or equivalently) (-+++)*is* a physical fact about the universe. It's a very important fact, and it makes for a big difference between spacelike and timelike separations.

—

Daryl McCullough
Ithaca, NY

.

Re: invariance of negative signature of the metric?