

Re: Rigid rod problem

Source: <http://sci.tech-archive.net/Archive/sci.physics.relativity/2005-09/msg00537.html>

- *From:* "Spoonfed" <jonathan.doolin@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* 6 Sep 2005 14:19:27 -0700
-

russ...@xxxxxxxx wrote:

> Kim B wrote:

>

> [snip]

>

>> If you choose a point on the rod a use its current speed as your FOR,
>> the the rest of the rod will fit nicely in this FOR (along the FOR's
>> line of simultaneity) ... with the same speed all along and the
>> correct proper length, exactly as it fits in our "rest" frame at the
>> base line ... all frames are equal, assuming the rod has accelerated
>> and will accelerate forever.

>

> Thanks. Of course you are quite right about that, and I
> apologize for my many mistakes here.

I believe it when I hear it, but it's a little tricky to figure out.

It seems surprising that no matter what reference frame you are in, all parts of the rod will pass $v=0$ at the same time. I'm not in the mood to develop a proof, but it seems right.

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• *Follow-Ups:*

◆ ***Re: Rigid rod problem***

◇ *From:* russell

◆ ***Re: Rigid rod problem***

◇ *From:* Kim B

• *References:*

◆ ***Re: Rigid rod problem***

◇ *From:* russell

◆ ***Re: Rigid rod problem***

◇ *From:* Spoonfed

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◇ *From:* russell

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 - ◇ *From: Spoonfed*
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 - ◇ *From: Kim B*
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 - ◇ *From: Kim B*
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 - ◇ *From: russell*

- Prev by Date: **Re: Why a Problem?**
- Next by Date: **johnreed take 6.1**
- Previous by thread: **Re: Rigid rod problem**
- Next by thread: **Re: Rigid rod problem**
- Index(es):
 - ◆ **Date**
 - ◆ **Thread**