

SR Postulate on Speed of Light

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 - *Date:* 19 May 2005 19:00:46 -0700
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I am confused by the typical wording that one finds for the second postulate of SR, namely that the speed of light is independent of the motion of the source. The speed of any wave depends only on the medium, so the motion of the source is not relevant. Consider a horn moving through the air. It emits a sound wave. Once the wave leaves the horn, its speed depends only on the properties of the air.

Now it's true that for someone traveling with the horn, the speed of the sound would be greater in the forward direction than the backward direction, but this has more to do with the speed of the OBSERVER (relative to the medium).

I am more comfortable with an alternate statement of the second postulate, namely that the speed of light is the same for all inertial observers.

Are these two formulations of the second postulate equivalent?

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◇ *From:* john_doe_ph_d
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◇ *From:* Bilge
 - ◆ **Re: SR Postulate on Speed of Light**
◇ *From:* kenseto
 - ◆ **Re: SR Postulate on Speed of Light**
◇ *From:* john_doe_ph_d
 - ◆ **Re: SR Postulate on Speed of Light**
◇ *From:* Curious
 - ◆ **Re: SR Postulate on Speed of Light**
◇ *From:* Harry
 - ◆ **Re: SR Postulate on Speed of Light**
◇ *From:* Gerald L. O'Barr
 - ◆ **Re: SR Postulate on Speed of Light**
◇ *From:* Bill Hobba

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