

Re: Two frames inside a light cone are timelike, on the cone is lightlike.

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- *From:* "Randy Poe" <[poespam-trap@xxxxxxxxxx](mailto:poespam-trap@xxxxxxxxxx)>
  - *Date:* 15 Feb 2007 13:51:23 -0800
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On Feb 15, 1:42 pm, Jeff...Relf <[Jeff\\_R...@xxxxxxxxxx](mailto:Jeff_R...@xxxxxxxxxx)> wrote:

Very well put Daryl\_McCullough, Thanks.

Two frames inside a light cone are timelike, on the cone is lightlike.

If  $-+++$  equals zero then the two frames form the end-points of a null-geodesic on the light cone, a "lightlike" path on the surface of a spacetime.

If it's less than zero, then the frames lie inside the light cone and they are "timelike", otherwise it's "spacelike".

You seem to be missing the concept of "separation", which is what the adjectives "timelike" and "spacelike" modify. You also seem to be missing the concept of "events", which is what is separated when talking about a timelike or spacelike separation.

– Randy

P.S. Note on English usage: No space between quote and word being quoted. "Timelike", not "timelike".

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