

Re: .999... ?= 1

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Robin Chapman wrote:

>>I am still touching in the dark. So far I do not know what could be most
>>helpful to me. I just got a new book on signal processing for judgement.
>>Of course, they are sticking in the exclusively complex-valued analysis.
>>I did not find the slightest allusion that time between minus infinity
>>and plus infinity just stems from Heaviside's clever trick and Laurent
>>Schwarz's generalized functions based on \mathbb{R}^{∞} . This omission
>>does not just lead the average reader to the illusion future time is
>>anticipated. More detrimentally, function of the inner ear cannot be
>>understood correctly as long as hoity-toity theorists need weird detours
>>when modelling (British spelling, OK?) it instead of trusting in my
>>pretty simple natural spectrogram.
>>I do not intend to bother mathematicians for nothing.
>
>
> Why are you bothering mathematicians then?

See above. I acknowledge you explained to me why generalized functions and distributions were introduced. I am still uncertain whether or not the distributions would also make sense with the restriction to \mathbb{R}^+ . Of course, I would not expect such " \mathbb{R}^+ distribution" to provide the derivative of Dirac delta.

To some extent I also ask for clarity how to deal with zero. It is still my gut feeling that as far as real numbers represent real time, exclusion of zero like a neutral position between \mathbb{R}^+ and \mathbb{R}^- does not make sense. In principle, the whole issue is of no relevance for an elapsed-time based analysis just within \mathbb{R}^+ because in this case there is no stationary value at zero. Imagine the function of time permanently moving towards larger elapsed time and getting new values at its origin. Admittedly, this notion of time is quite uncommon. I merely have to explain how the analysis in \mathbb{R}^+ relates to Heaviside's trick buoying generations up with seeming symmetry.

Let me add why I do not completely trust in Abraham Robinson's hyperreals. He reached a lot of improvement. However, he did not abandon the relations larger equal and smaller. So he cannot release Buridan's donkey because this would require to accept that integers and other discrete values are of no special weight (in the sense of distributions)

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within a continuum. I see any attempt to completely bridge the gap between finite and infinite doomed to fail. Why not accepting this and declare the donkey cheating from the very beginning? It cannot be at a neutral position if it is expressed in terms of a continuum. A continuum can be cut through, a number not. Do no longer believe the fairy tail that integrals and reals are about the same matter.

Eckard