Re: calculous in the curve space theorem 3

Source: http://sci.tech−archive.net/Archive/sci.physics.relativity/2007−11/msg00033.html

* *From*: Joro <g.g.kanev@xxxxxx>
* *Date*: Thu, 01 Nov 2007 04:59:00 −0700

On 31 :B, 12:29, sal <pragmat...@xxxxxxxxxx> wrote:

> Why did you repost your message without replying to responses first?
> Anway, here's my reply again.
>
> On Tue, 30 Oct 2007 23:23:18 −0700, caoyanwh2003 wrote:
>
>> Cao's theorem 3
>>
>>> From when x’0 there are sin x=x, ex−1=x, ln(1+x)=x,
>>> (1+x)^0−1=0x, we
>>
>> can conclude follow theorem
>> 1, 5sin dx=dx
>>
>> 4 +sin dx dx=+dxdx=1
>
> As written, that's wrong. The integral of an infinitesimal value is
> zero. You've got the integral of dx^2:
>
> +(dx)^2
>
> and that's zero, not 1, over any finite interval of integration.
>
> To see this more clearly, look at the limit which defines the (Riemann)
> integral, taking the integral of (dx)^2 from "a" to "b":
>
> lim_{n−>infty} [sum_0^{n−1} (((b−a)/n)^2)]
>
> The summands are all the same value, so we can replace the sum with
> multiplication by the number of terms in the sum:
>
> lim_{n−>infty} [n * (((b−a)/n)^2)]
>
> Multiplying out, that's:

lim_{n−>infty} [(b−a)^2/n]

and that's certainly zero.

Of course your whole notion of infinitesimals seems to be very half−baked, as well. It's never the case that "sin dx = dx" for nonzero dx. Rather, if dx is infinitesimal, then sin(dx) − dx ~ dx^2. That is, in simple terms, the difference between sin(dx) and dx is doubly infinitesimal, but it's never zero, save when dx == 0.

2, 5 edx−1=dx

4 +(edx−1)dx=+dxdx=1

3, 5 ln(1+dx)=dx

4 +ln(1+dx)dx=+dxdx=1

4, 5 (1+dx)^0−1=0dx

4 +[(1+dx)^0−1]dx=+0dxdx=0+dxdx=0

These all can show even if a very tiny digital such as dx in the integral formula, we cann't deal it with 0 and then calculate them again, that is incorrect. Because even if a very tiny digital such as dx’0 , as after we calculate the integral formula , it is a number that cann't be ignored. The 4 can explain it throughly. 2007−10−31

−−
Nospam becomes physicsinsights to fix the email
I can be also contacted throughhttp://www.physicsinsights.org− !:@820=5 =0 F8B8@0=8O

B5:AB −

− >:0720=5 =0 F8B8@0=8O B5:AB −

What about case when dx and sindx like a function cannot expres themselves in numerical expression at the same time? In other words for instance if the dx inclenes to zero more quickly than the function sindx itself, than what...?
The answer is the so call belated functions. I recommend You to see USM www.kanevuniverse.com and especially partI, partII and pages 198 to 202. Thank You!

.