

## Re: bijection of $\mathbb{R}$ : $\mathbb{R} \leftrightarrow \mathbb{R}x \dots x\mathbb{R}$

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- *From:* "Timothy Golden <http://www.BandTechnology.com>" <[ttppppggg@xxxxxxxxx](mailto:ttppppggg@xxxxxxxxx)>
  - *Date:* 7 Sep 2005 10:21:28 -0700
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Does anyone reject this method on philosophical grounds?

The digits are merely a representation of a real number, not the real number itself. A value (a) and (b) in the reals would seem more valid, and a function defined mathematically:

$$c = f(a, b).$$

This thing you guys are doing is sort of a three tape Turing solution.

Yes it works but where is the purity?

How about a swirl where

$$t = c$$

$$r = c d$$

where  $t$  is theta and  $r$  is radius.

$$\text{now } a = r \cos t$$

$$\text{and } b = r \sin t$$

Within a delta related to  $d$  there will be a range of  $c$  that matches for any  $a$  and  $b$ .

If more accuracy is needed then drop  $d$ .

Does this approach work for 3D?

I don't see it.

-Tim

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- *Follow-Ups:*

- ◆ **Re: bijection of  $\mathbb{R}$ :  $\mathbb{R} \leftrightarrow \mathbb{R}x \dots x\mathbb{R}$**

- ◇ *From:* David C . Ullrich

- ◆ **Re: bijection of  $\mathbb{R}$ :  $\mathbb{R} \leftrightarrow \mathbb{R}x \dots x\mathbb{R}$**

- ◇ *From:* Ittay Weiss

- *References:*

- ◆ **bijection of  $\mathbb{R}$ :  $\mathbb{R} \leftrightarrow \mathbb{R}x \dots x\mathbb{R}$**

- ◇ *From:* Timothy Golden <http://www.BandTechnology.com>

- ◆ **Re: bijection of  $\mathbb{R}$ :  $\mathbb{R} \leftrightarrow \mathbb{R}x \dots x\mathbb{R}$**

- ◇ *From:* Peter Webb

- ◆ **Re: bijection of  $\mathbb{R}$ :  $\mathbb{R} \leftrightarrow \mathbb{R}x \dots x\mathbb{R}$**

- ◇ *From:* David C . Ullrich

Re: bijection of R:  $R \leftrightarrow Rx \dots xR$

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