

The Universe as a Register Overflow

Terry Bollinger

2023-06-08.08:51 EDT Thu

<https://youtu.be/tRaq4aYPzCc&lc=UgztM3WNHGwnkjk8u1Z4AaABAq.9qeYgjJoAdZ9qhE3jJoPNS>

A Comment on the [Veritasium YouTube](#) post:

The Strange Number System Where Infinity Is Tiny (Jun 6, 2023)

<https://youtu.be/tRaq4aYPzCc>

@ChaosNuggets — 2023-06-07.22:30~ EDT Wed
It's like the number system is overflowing.

...

@d1663m — 2023-06-08.07:30~ EDT Thu

@ChaosNuggets, this is what it felt like for me too. Like, "wtf, the universe can have a register overflow?! 🤯" One more "bit" of evidence that we're all just part of a massive computer simulation, right? 😊

...

@d1663m That's an interesting point since there are (uncommon) wavefront models of reality that abandon "objects" as fundamental entities and replace them with unresolvable soliton-like cyclic processes [1]. These solitons behave much like the left-moving carry-over sums in Derek's illustrations.

In one such wavefront model, each Standard Model fermion becomes a triple-binary (think xyz) "carry-the-sum" wavefront akin to what happened when Derek added a number on the right. The addition creates a wavefront (e.g., an electron) that then moves left, wiping out left digits and leaving zeros ("the past") in their wake.

Create enough unresolvable wavefronts, each defined by a different Standard Model triple-binary number and all moving in parallel, and you end up with a universe.

(With wavefront universes, you also necessarily generate a CPT-symmetric "contraverse" wave heading off in the opposite direction in time. Jennifer Chen and Sean Carroll developed this idea in 2004 [2], though I'm not sure their variant was CPT symmetric.)

Wavefront universe models are the opposite of "block" models since wavefronts only have "now." Even the past is nothing more than a subset of data — a memory — encoded into that wavefront.

[1] T. Bollinger, *On Quantizing General Relativity: An Overview*, Apabistia Notes (2022). <https://sarxiv.org/apa.2022-04-21.1039.pdf>. Pages 18-19 describe the most overflow-like aspect of chiral electron interactions. Wavefront universes violate special relativity in xyz² space but work fine in distance-squared Lorentz 3-space with *local* parsing into xyz².

[2] S. M. Carroll and J. Chen, *Spontaneous Inflation and the Origin of the Arrow of Time*, arXiv Preprint Hep-Th/0410270 (2004). <https://arxiv.org/abs/hep-th/0410270>