

## Fixing Theoretical Physics is Mostly a Social Problem

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*Email Excerpt*

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... Thanks for mentioning the NPR interviews with NIST on the nature of time — I'll look that one up.

My mention of the vacuum data storage issue to you prompted a new essay on my blog site [\[1\]](#). I've slowed down on posting items since locking onto unusually high probabilities for the geodesic/Schrödinger path as the most likely path for reconnecting quantum and gravity.

The vacuum data storage question is closely related. [Inadvertently assuming the vacuum to have data storage-retrieval capacity] provides a stark explanation of why so much of the past half-century of theoretical physics has produced nothing of any consequence. Physicists with deep math backgrounds have lost the ability to distinguish between programming abstractions — point particles in particular — and physical reality, even while *nominally* admitting, "sure, no *physical* particle can be a point."

[The point problem] is worse than that: Even *special relativity* doesn't allow mathematically self-consistent definitions of points if you take it seriously enough. You instead get these weird, stretched-out, "quantum spaghettified" events that make good points only at the classical extremum.

[The main difficulty is not precisely a] physics problem anymore, though the elaboration of switching from xyzt to something less classical will be pretty horrendous and lengthy. The backtracking "debugging" lock [on curved space as emergent from multi-scale flat quantum domains] is too solid. It's more of a fascinating social intelligence game of how to get a century of physics off of its collective butt and recognize that you can't build good physics on top of mathematical fantasies based far more on cognitive brain biases than lab physics. Our brains approve of classical, and that fools math folks especially.

Cheers,  
Terry

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[1] One Question to Rule the Future of Physics  
<https://sarxiv.org/apa.2022-12-15.2155.pdf>

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