

Re: "Vacuum catastrophe" and string theory

Source: <http://sci.tech-archive.net/Archive/sci.physics/2007-05/msg00798.html>

- *From:* mike3 <mike4ty4@xxxxxxxx>
 - *Date:* 8 May 2007 17:47:40 -0700
-

On May 8, 5:54 pm, Sam Wormley <sworml...@xxxxxxxx> wrote:

mike3 wrote:

Hi.

Does string theory purport a solution to the so-called "vacuum catastrophe" problem? This problem is how to rationalize the huge zero point energy (ZPE) of the vacuum predicted by quantum mechanics, with the experimentally small cosmological constant (λ). How does it do this? It's a tough situation. If you toss out the huge ZPE and decide instead it should be tiny, then you toss quantum mechanics. If you toss out the cosmological constant in favor of the quantum predictions, then you toss out general relativity. But string theory is supposed to combine these two, and if it does that, it should be able to answer this problem. So how does it?

String theory has yet to make a testable prediction. Therefore it is not scientific!

Observation strongly constrain a value for a cosmological constant in GTR.

So then you're saying string theory does not know how to rationalize, nor is there any way to test any proposed rationalization. And if it is not scientific, why bother? Why not try a different approach?

.