

Who's Afraid of the Multiverse

Jeffrey A. Zweerink

When my wife and I visited our daughter in New Mexico, she took us to Santa Fe to experience the multiverse first hand. We visited various universes and went through the vortex and heard aliens from other worlds and saw where they live. Who says there is no multiverse?

When reading about the multiverse one sees the plutonic world and material world all put in a bag, shaken up and then poured out to look at. What is real from what is made up is difficult to determine. What is clear and let it be stated up front is that the basic need for a multiverse is to remove a creator from the picture. For that, the multiverse has to have just one property which is that it has no other properties other than spitting out universes. The universes it spits out have to have some subset of an infinite set of properties. Our universe has four forces and a small number of particles with a relationship between them. It also has three physical dimensions. There can be other universes, must be, with a different set of particles, forces and dimensions. There will be every conceivable universe and an infinite number of universes that we cannot conceive of. If this is not the case, then the multiverse has the property to spit out universes with some defined set of properties. Where did the multiverse get that property? Remember the purpose is to eliminate the need for a creator. Perhaps there are many multiverses with different properties to spit out universes. There could be an ultraverse spitting out multiverses.

Call our universe a universe of order one, U_1 . The multiverse is of order two, U_2 . The ultraverse will be of order three, U_3 and so on. If any order of universe has properties other than to spit out universes of one lower order then it must have sprung from a universe of higher order. The universe of higher order has the property to spit out universes of one order lower that have a subset of properties from an infinite set of conceivable and unconceivable properties. The order of universe continues to get higher until one calls out in frustration "help me Lord". But the whole idea is to do away with a creator. In this dilemma, the only reasonable thing for any respectable astrophysicist to do is suicide.

The book packs a lot in just 60 pages. It is very informative and entertaining. I will likely want to reread it in a few months and have more thoughts on ultimate reality for whatever good such thinking does.

Many physicists who talk about the multiverse, especially advocates of the string landscape, do not care much about parallel universes per se. For them, objections to the multiverse as a concept are unimportant. Their theories live or die based on internal consistency and, one hopes, eventual laboratory testing. Ellis says that scientists have proposed the idea of the multiverse as a way of explaining the nature of existence. As skeptical as I am, I think the contemplation of the multiverse is an excellent opportunity to reflect on the nature of science and on the ultimate nature of existence: why we are here. In looking at this concept, we need an open mind, though not too open. It is a delicate path to tread.