

Quantum Santa

Reg Harbeck, CA

I have just received from a dear cousin of mine a “proof” using classical Newtonian Physics that Santa can’t exist. And it seems quite impressively done, with conservative estimates and some seriously eye-popping measures of energy and momentum and their consequences.

So I got to thinking about the physics involved, and realized that we’ve had a few iterations in our understanding of the measurable universe since Newton’s time.

Of course, there’s Einsteinian Relativity, and the idea that the closer you get to the speed of light, the slower time goes. The only problem is that it would be Santa, at his breakneck speeds, who would experience the slowdown in time, among other consequences that accompany mass and great velocity.

Then I realized that I’d been looking at the problem all wrong: it’s about quantum physics, and specifically the many-worlds interpretation of it.

So, here’s how Santa actually does it:

First, the matter of mass (and vice versa). It’s quite easy to get bogged down with gravity, but there are numerous first-person observer references to the fact that Santa contains within himself the very antithesis of gravity: levity. His jollity is not merely a pleasant trait, it’s his motive mode. Not only does it provide a clear alternative to gravity, but levity also means light, and that’s where the real science of Santa begins to shine.

Santa’s biggest secret is that, while he’s often made light of, it’s actually the case that he’s made of light! And it’s not just Santa: it’s his reindeer too, as demonstrated by Rudolph’s shining nose. Indeed, the observed redness of it may be a manifestation of the Doppler effect as he moves rapidly away from the observer.

And that’s the final piece of the puzzle: the observer. Quantum physics teaches us that light behaves like a wave, taking every possible path to the degree that each path is likely, as long as no observer makes a discrete measurement to determine which path has been taken. So, the observer may see Santa retreating, but the important thing is that he not be “caught in the act” of delivering the gifts.

Or rather, the gift.

Because, in fact, there are hundreds of millions (possibly more) of potential measurable gifts, but only one gift that is actually delivered with varying degrees of likelihood about what it is (which consequently has a much more feasible mass for Newtonian physics to carry forward).

Bring it all together, and you have a quantum Santa who “might” visit every house on earth and “might” deliver every possible gift all at the same time.

BUT, you may object, what about the actual fact of opening the gifts: doesn’t letting Schrödinger’s cat out of the box collapse all the potential gifts into one known gift leaving every child on earth but one feeling “grinched”?

Well, as it turns out, this is a special case because of one unique phenomenon: regifting. Not just any regifting, either: regifting the same, wrapped gift without ever opening it, based on the suspicion (but not knowledge, mind you) of what it actually contains.

There are actually quite a few such regiftables out there, and every time one is destroyed by someone who makes the mistake of thinking the contents might still be usable (or, worse, edible), it is replaced by several new ones, which have the self-selecting quality of appearing tacky and having seemingly predictable contents.

Of course, there is always a theoretical danger that every last regifted gift might some day be opened, causing every Christmas gift ever delivered to collapse back into a single gift some time in the distant past.

In fact, the greatest danger of this is curious children peeking under the tree and using various methods to try to find out for certain the contents of the gifts before it has come time to open them.

In order to occlude the possibility of this, Santa has a secret weapon: coal. Those children who threaten the whole system by “looking in the box” find themselves in possession of this black-coloured antidote, which is both a symbol and effective countermeasure to the disclosure of hidden light.

You have now been enlightened about the wonder present with Santa.