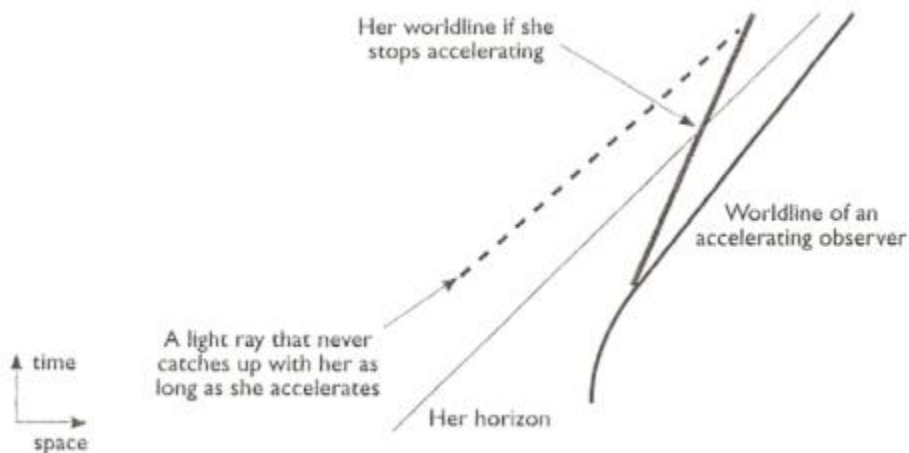


What's Wrong with Quantum Gravity

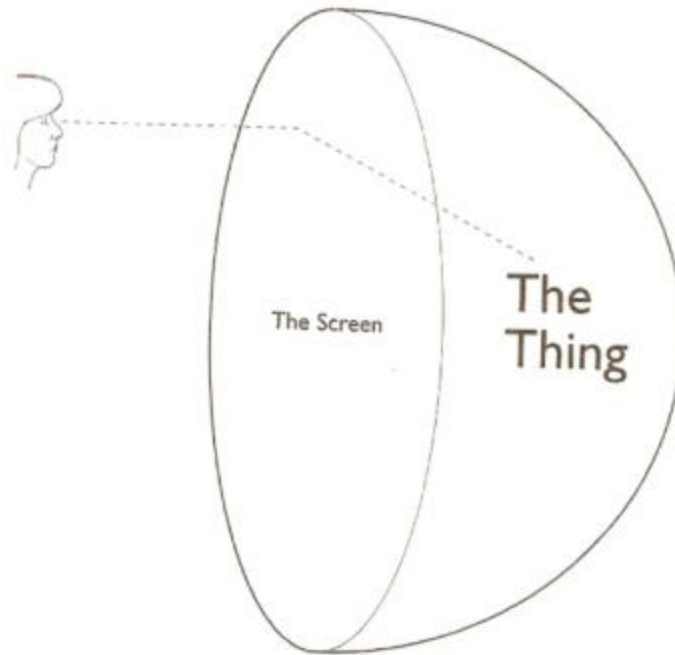
Watch this PBS Space Time video about the problem of quantum gravity:

What If Gravity is NOT Quantum?

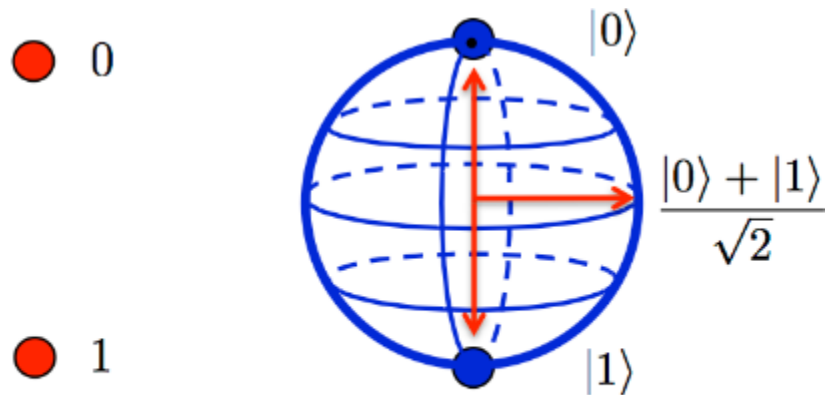
The fallacy of this argument is that it falsely assumes that quantum implies quantum field theory, which is inherently a point particle description. Gravity is indeed quantum, but it is not a quantum field theory. It's impossible to quantize Einstein's field equations for the space-time metric as a QFT. It's impossible to reduce the dynamical curvature of space-time geometry to a point particle that propagates through some space-time geometry, like flat Minkowski space. The correct answer for the quantum nature of gravity is the holographic principle. Gravity is quantized when qubits of information are encoded on a holographic screen along the lines of a Matrix model (see the work of Tom Banks). This is also the case in the AdS/CFT correspondence, where there is a natural conformal boundary of anti de Sitter space. In the more general case the natural boundary of space is an event horizon that arises in an observer's accelerated frame of reference, like a de Sitter cosmic horizon in de Sitter space. The observer's cosmic horizon becomes its holographic screen when it encodes qubits of information along the lines of a Matrix model. Einstein's field equations for gravity amount to nothing more than a thermodynamic equation of state that describes gravitational events in a holographic world when things are near thermal equilibrium (see the work of Ted Jacobson). The big question that no one wants to confront is: What is the nature of the observer (see Amanda Geffer's book *Trespassing on Einstein's Lawn*).



Accelerating Observer's Event Horizon



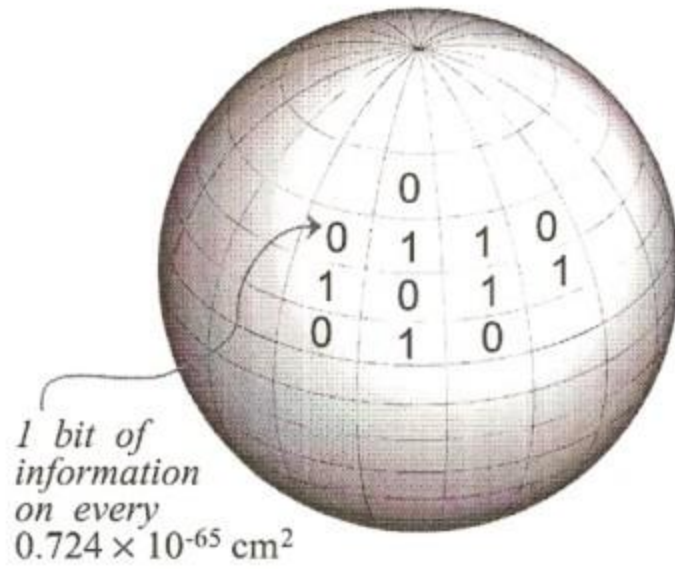
The Observer's Holographic Screen



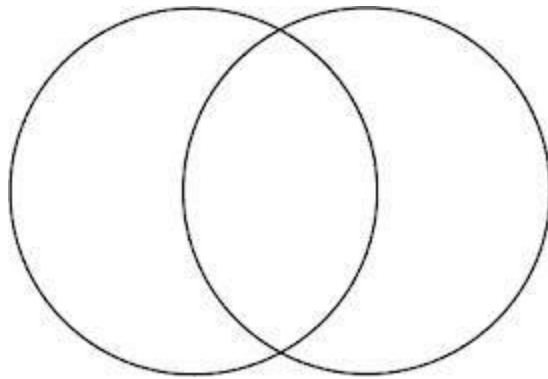
Classical Bit

Qubit

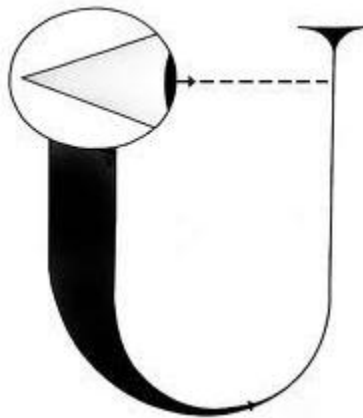
Qubit of Information Encoded on a Planck-size Event Horizon



Holographic Principle



Information Sharing Among Overlapping Holographic Screens



Universal Observer

There Is No Reality in Reality

In a jesting sort of way, Jed McKenna says "there is no reality in reality". What he means is that the reality that you perceive is not the reality of what you are. The reality you perceive is a virtual reality, like the images of a virtual reality world being displayed on a computer screen. The reality of what you are is the reality of the consciousness that perceives the images of that virtual reality world. Only the reality of what you are really exists. Consciousness exists. The images of that virtual reality world only have an apparent momentary existence, like the animated images of a cartoon character that appears in a movie that you perceive, as that movie is being displayed on a computer screen. Bugs Bunny doesn't really exist except as part of the cartoon. Underlying the images of all the characters in the movie are the bits of information encoded in the computer and on the computer screen that give rise to the appearance of the images, and the flow of energy through the computer that animates the images. Information and energy exist within the computer, just as consciousness exists at a point of view to which the animated images of the movie are projected from the computer screen, but the cartoon character doesn't really exist except as a part of that virtual reality world.

The holographic principle explains how that virtual reality world is created. That creation begins with an accelerating observer in an accelerated frame of reference, which gives rise to the observer's event horizon that becomes its holographic screen when qubits of information are encoded on its horizon. The observer is at the central point of view of its own holographic world, and in effect is creating a quantum computer that gives rise to the appearance of its own holographic world.

The holographic principle tells us that every observer creates its own quantum computer that gives rise to the appearance of its own virtual reality world that's created when the observer, present at the central point of view of its own holographic world, enters into an accelerated frame of reference that gives rise to its event horizon that becomes its holographic screen when qubits of information are encoded on its horizon, just like bits of information encoded on a computer screen. Even the animating energy that flows through the computer arises from the energy of the observer's own accelerated motion. A consensual reality shared by many observers, each at the central point of view of its own holographic world, is created when their respective holographic screens overlap like a Venn diagram and share information, just like the information sharing that occurs in a computer network. Each observer creates its own virtual reality world, but what appears in that virtual reality world is no more real than the projected and animated images of a movie being displayed on a computer screen. Even the information and energy inherent in that virtual reality world can only arise due to the accelerated motion of the observer. The observer's virtual reality world only appears to come into existence due to its accelerated motion. In the end, when that accelerated motion comes to an end, that virtual reality world disappears from existence from the observer's own point of

view and only the consciousness of the observer ultimately exists. When everything in your own world disappears from existence from your own point of view, what remains? The answer is nothing. That absolute nothingness is what you ultimately are.



Nothingness

In the immortal words of the Bhagavad Gita:

*The unreal has no being
The real never ceases to be*

In the last several lines of the Tempest, Shakespeare gives a description of spiritual enlightenment, just as Plato gives a description of spiritual enlightenment in the Allegory of the Cave:

*We are such stuff
As dreams are made on, and our little life
Is rounded with a sleep*



Plato's Cave

*Life is but a walking shadow, a poor player
That struts and frets his hour upon the stage
And then is heard no more. It is a tale
Told by an idiot, full of sound and fury,
Signifying nothing*

*To die, to sleep
To sleep, perchance to dream-ay, there's the rub
For in that sleep of death, what dreams may come
When we have shuffled off this mortal coil*

Shakespeare, like Plato, is almost universally misunderstood by those who read his works and then try to give them an interpretation, because those who try to interpret Shakespeare and Plato are not spiritually enlightened, and really have no idea what Shakespeare and Plato are really talking about.

We are not human beings having a spiritual experience; we are spiritual beings having a human experience.-Pierre Teilhard de Chardin



All Seeing Eye

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