The Debate Between The Advancement Of Physics And Free Will

The debate between the advancement of physics and free will is convoluted. The prototypical deterministic theory also known as Newtonian Mechanics is in tension with free will: people are being puppeteered by the laws of nature. People couldn't find any other way than the indeterminism of quantum mechanics. Nonetheless, the fact that it is not the same as randomness makes it conflict with indeterminism. Still, lately, Kochen and Conway proved a theorem, Free Will Theorem as they call it, to settle that the quantum mechanics, either deterministic or stochastic, is conflicting with free will when combined with relativity but also requires it in some sense. In this paper, I argue that Conway and Kochen's Free Will Theorem to the conclusion that quantum mechanics and relativity call for freedom for the particles, does not change the place of a libertarian position as per their will. In fact, the theorem more or less implicitly assumes that people are free, and thus it begs the question.

Since the time QM(Quantum Mechanics) was defined, several people have called this to be the basis of free will in humans. Primarily, they contend that free will is possible because there is an ontological indeterminism in the laws of nature and that the responsible thing for the wave function collapse of the matter is the mind, leading to an option among the various chances for the body. However, I defend the opposite thesis, that free will cannot be defended in terms of Quantum Mechanics. Firstly, because indeterminism does not imply free will, it is close to being a required condition but is not enough to defend it. Secondly, due to all discussions about an autonomous mind assigning orders to the body is contrary to our scientific knowledge about human beings; in particular, both neurological and evolutionary theory cannot admit dualism. The Quantum theory of measurement can be interpreted without the interference of human minds, but other fields of science cannot observe the mentalist scenario, so it's decided that QM doesn't have anything to say regarding the free will or mind, and moreover its scientific explanation is less related to physics than to biology.

A fatalistic or materialist view, which denies the possibility of free will, makes much more sense in scientific terms.

In addition to this, Conway and Kochen take their theorem to be an "impossibility proof" against deterministic completion of quantum mechanics and the possibility of constructing relativistic invariant stochastic quantum theories. Quantum mechanics suffer from the measurement problem: if quantum mechanics is a theory only about the wave-function evolving according to the Schrödinger evolution, then unphysical "macroscopic superpositions," that is in superpositions of macroscopically different states of affair (like a dead and an alive cat), arise. Several theories have been proposed to deal with this, some of which are deterministic, like the pilot-wave theory (30, 31), others instead are stochastic, like the spontaneous localization theory (32). The former avoids macroscopic superpositions postulating that the complete description of any physical system is given by the wave-function together with the position of the particle evolving deterministically. The spontaneous localization theory instead postulates that the wave function evolves stochastically so that the macroscopic superpositions promptly disappear. Conway and Kochen argue that their theorem rules these theories out. Since they claim that conditional (1) implies that determinism is false, they conclude that deterministic

completion of quantum mechanics are impossible. From conditional (2) they conclude that any stochastic completions of quantum mechanics so constructed cannot be made relativistic invariant, given that they would violate relativity (by violating MIN).