

## Peer Review

# Review of: "Quantum Theory of Soul"

**Marco Masi<sup>1</sup>**

1. Independent researcher

While I myself do often speculate about similar metaphysical subjects and believe to be open to conjectures that try to unify science and spirituality, I can't see much value in this work. I'm a great supporter of fostering imagination, intuition, speculation, sometimes also wild speculations, but then there must come a point where these have to be grounded in a sound and coherent theoretical framework that has some plausibility. Unfortunately, I must say that here this isn't the case.

Firstly, if the authors' intention is to publish in a peer-reviewed academic journal, they will have to use a more rigorous conceptualization and terminology. I guess they aren't physicists. If so, they should involve someone who is and could help them to reframe everything into an appropriate language. For example, what is a "quantum vibrational field"? In theoretical physics, a quantum field is a functional over a space-time manifold where particles are represented by excited harmonic oscillators (and I'm putting it bluntly as well). Thereby, yes, there is something "vibrating" there, but things are not as easy as the authors seem to assume. Or, saying that "the probabilistic nature of a wave function describes the information aspect of an object" doesn't mean much. Probably they mean that one can create a relationship between the density matrix (an extension of the wave function) and Von Neumann's quantum entropy, which could be seen as a quantum information measure in analogy with Shannon's entropy (And, by the way, in reality, this measures not a content but a loss of information.) Throughout the paper, several other instances of sloppy language of this kind can be found.

But, terminology apart, it is the whole rationale that doesn't hold. For example, saying that the "soul is the information carried in our quantum vibrational field" is just a play on words, not a statement with much scientific meaning. In a sense, everything contains information, even a random series of bits. And this makes it a sentient soul?

Perhaps, one could get nearer to the philosophy of mind when they state that “an electron has its soul, spiritual heart, and mind,” supporting a panpsychist (more precisely micropsychist) view of reality. But this is not expressed in the article.

The only thing that attracted my interest is the idea of how to solve the interaction problem of mental causation with the “mind that directs the energy flow,” instead of violating the energy conservation principle. But this also has been expressed so vaguely, with nothing that goes into the details, leaving the reader wondering what really is meant and if it is physically sound.

The part on parapsychology is equally doubtful. Saying that “psychokinesis or remote viewing is the result of sending information and vibrations to the universal field to affect objects” is a much too vague declaration that can mean a lot of things and the opposite of it. In the experimental proof section, there is no mention of how this is supposed to be tested. Even if remote viewing were confirmed, this would not substantiate the claim that it has anything to do with quantum fields.

This doesn't mean that it is wrong, either. Intuitively speaking, I'm sympathetic to this metaphysical vision of reality. However, if we want to connect metaphysics with quantum physics, this must be done with a minimum of rigor, relating it to the present scientific and philosophical knowledge (e.g., as I have done here: [bit.ly/3qoF23L](https://bit.ly/3qoF23L)).

After all, the article does not furnish any new insights. At best, it restates what is well known, and then throws way too many ideas into a metaphysical discourse without furnishing any link or bridge that justifies these extrapolations. I don't believe it could be presented to a serious journal. What I can eventually suggest doing is to pick up one or two claims and work hard on these, without trying to create yet another theory of everything. That would help the authors to focus and get a deeper insight into what they intuit, but still can't express in a scientific and consistent language.

## **Declarations**

**Potential competing interests:** No potential competing interests to declare.