

Is light a wave or a particle?

<https://www.quora.com/Wave-Particle-Duality/Is-light-a-wave-or-a-particle/answer/John-Ringland>

<http://anandavala.info/article/Is-light-a-wave-or-a-particle.pdf>

In a scientific realist interpretation of quantum mechanics light is neither a wave nor a particle, it is a quantum system, which is itself unobservable yet known via the mathematical abstractions of quantum mechanics. When this quantum system interacts with another quantum system (such as an experimental device) it gives rise to either a wave-like or a particle-like observable depending on the nature of the interaction. However the quantum system cannot be defined by these observables since they have no objective existence because they are generated in response to the act of observation.

Why does this seem paradoxical to people? How can we really understand this? How can we really understand quantum mechanics in general? See [Will we ever be able to truly understand Quantum Mechanics?](#)

If you want to read my full answer to this question then please read that link. I moved the discussion that was here over to that question in order to maintain better Q&A consistency.