

Peer Review

Review of: "Negation of the Separatedness-Based Framework as a Methodological Principle"

Miloš Milovanović¹

1. Serbian Academy of Sciences and Arts, Belgrade, Serbia

The paper concerns an intuitionist methodology, considering its application and limitation in physics. It is based upon an observation which results in the time continuum that is a fundamental category of intuitionist mathematics. Such a continuum is not a set of diverse elements that should satisfy classical logic.

The author considers two alternatives that might be mutually dependent. The first concerns probability, and the second one concerns time. The conception was actually elaborated by Ilya Prigogine and the Brussels School of Thermodynamics, in consideration of complex systems that are defined by the time operator formalism. The existence of the time operator enables a change in representation from diverse points of the phase space to some non-localized states.

Misra, Baydyanath, and Ilya Prigogine. "Irreversibility and nonlocality." *Letters in Mathematical Physics* 7.5 (1983): 421-429.

The conception has led to a probability theory that is complete and objective, which affects the interpretation of quantum mechanics.

George, Claude, and Ilya Prigogine. "Coherence and randomness in quantum theory." *Physica A: Statistical Mechanics and its Applications* 99.3 (1979): 369-382.

The paper demands an improvement by including the aforementioned achievements. The author should include the time operator formalism in the alternative section of his work. He should also refer precisely to the time continuum of Brouwer, relating it to the observation and the measurement. In that manner, the intuitionism of the paper is supported by a concrete structure that is an alternative to phase space

elements. The change in representation that is induced by the time operator is developed in order to potentiate such a transition.

Declarations

Potential competing interests: No potential competing interests to declare.