Bohm's Ontological Interpretation and Its Relations to Three Formulations of Quantum Mechanics

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Abstract

The standard mathematical formulation of quantum mechanics is specified. Bohm ' s ontological interpretation of quantum mechanics is then shown to be incapable of providing a suitable interpretation of that formulation. It is also shown that Bohm ' s interpretation may well be viable for two alternative mathematical formulations of quantum mechanics, meaning that the negative result is a significant though not a devastating criticism of Bohm ' s interpretation. A preliminary case is made for preferring one alternative formulation over the other.

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