

Avicenna-Bohm Theory of Consciousness

Abstract

A new paradigm has been established in the field of cognitive science according to modern physics, which investigates cognitive issues, especially consciousness and mind-brain interaction, with the help of mathematical and ontological foundations of modern physics, especially quantum mechanics. Among this wide field of research, some more comprehensive theories have been proposed in the past decades, which describe the subjects and solve the related problems in the interdisciplinary atmosphere of physics, biology, and philosophy. They include Eccles-Beck, Heisenberg-James, Penrose-Hameroff, and Avicenna-Bohm theories. In this presentation, after a short reviewing the literature, we will briefly review Avicenna-Bohm's theory. This theory in the context of Avicenna's philosophy proposed a new model of mind and brain interaction using a special extension of Bohmian quantum theory to the level of QFT, in which the abstract mind affects the brain and guides it through the Bohmian force without violating the laws of physics. Paying attention to the hierarchical structure, top-down causality, free will, causation, and temporal non-locality are among the special features of this theory.