

A possible quantum basis of panpsychism

Gao, Shan (2001) A possible quantum basis of panpsychism.

Full text available as:

[PDF](#) - Requires a viewer, such as [Adobe Acrobat Reader](#) or other PDF viewer.

Abstract

In this paper, we will present a new argument based on revised quantum dynamics (Ghiradi et al, 1986; Pearle, 1989; Diosi, 1989; Ghiradi et al, 1990; Penrose, 1996; Gao, 1999a, 1999b; Gao, 2000), which is generally taken as the promising complete version of present quantum theory (Penrose, 1989; 1994), and has been used to construct a consciousness theory (Hameroff et al, 1996a; 1996b). It is shown that consciousness may help to distinguish the nonorthogonal single states in the framework of revised quantum dynamics, while the usual physical measuring device can't (Gao, 1999c; Gao, 2000). We further analyze the possible inferences of this unusual conclusion, and demonstrate that it strongly implies that the physical world is not causally closed without consciousness. The fact that consciousness violates the basic physical principle also reveals that consciousness is a fundamental property of matter, and a complete theory of matter must involve consciousness. We conclude that the above argument provides a possible quantum basis for panpsychism.

Keywords: quantum,panpsychism,consciousness,existence,fundamental property of matter,revised quantum dynamics

Subjects: [Specific Sciences: Cognitive Science](#)
[Specific Sciences: Computer Science: Artificial Intelligence](#)
[Specific Sciences: Physics: Quantum Mechanics](#)

ID Code: 467

Deposited By: [Gao, Shan](#)

Deposited On: 05 November 2001