

# Falsifications of Hameroff-Penrose Orch OR Model of Consciousness and Novel Avenues for Development of Quantum Mind Theory

Georgiev, Danko (2006) Falsifications of Hameroff-Penrose Orch OR Model of Consciousness and Novel Avenues for Development of Quantum Mind Theory.

Full text available as:

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

[Postscript](#) - Requires a viewer, such as [GhostView - GSView](#)

## Abstract

In this paper we try to make a clear distinction between quantum mysticism and quantum mind theory. Quackery always accompanies science especially in controversial and still under development areas and since the quantum mind theory is a science youngster it must clearly demarcate itself from the great stuff of pseudo-science currently patronized by the term "quantum mind". Quantum theory has attracted a big deal of attention and opened new avenues for building up a physical theory of mind because its principles and experimental foundations are as strange as the phenomenon of consciousness itself. Yet, the unwarranted recourse to paranormal phenomena as supporting the quantum mind theory plus the extremely bad biological mismodeling of brain physiology lead to great scepticism about the viability of the approach. We give as an example the Hameroff-Penrose Orch OR model with a list of twenty four problems not being repaired for a whole decade after the birth of the model in 1996. In the exposition we have tried not only to present critique of the spotted flaws, but to provide novel possibilities towards creation of neuroscientific quantum model of mind that incorporates all the available data from the basic disciplines (biochemistry, cell physiology, etc.) up to the clinical observations (neurology, neurosurgery, molecular psychiatry, etc.). Thus in a concise fashion we outline what can be done scientifically to improve the Q-mind theory and start a research programme (in Lakatos sense) that is independent on the particular flaws in some of the existing Q-mind models.

**Keywords:** quantum mind, consciousness, Hameroff-Penrose Orch OR, microtubules, neuron

**Subjects:** [Specific Sciences: Cognitive Science](#)

**ID Code:** 3049

**Deposited By:** [Georgiev, Danko](#)

**Deposited On:** 19 November 2006