

Quantum Curiosities of Psychophysics

Butterfield, Jeremy (1997) Quantum Curiosities of Psychophysics.

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Abstract

I survey some of these connections between 'collapse solutions' to the measurement problem, and the metaphysical doctrine of physicalism. I have two main conclusions. (1) These solutions, though compatible with physicalism, can involve a very different conception of the physical from what most philosophers and neuroscientists expect. (2) The 'Wigner-Stapp' solution gives a real-life example of a problem, which metaphysical discussions of physicalism have seen only in the abstract: the problem that because psycho-physical correlation is a 'two-way street', the strategy of defining physicalism in terms of supervenience threatens to be too weak. That is, the precise definition can be satisfied, even while intuitively physicalism is false. A version of the paper has appeared in "Consciousness and Human Identity", ed. John Cornwell, OUP 1997, pp. 122-159.

Keywords: measurement problem, collapse of the wave packet, physicalism, reductionism, supervenience, Wigner, Stapp

Subjects: [Specific Sciences: Physics: Quantum Mechanics](#)
[General Issues: Reductionism/Holism](#)

ID Code: 193

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Deposited On: 09 March 2001