

The Brain as a Measuring Apparatur

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Modern C^* -algebra-based measurement theory claims that Einstein-Podolsky-Rosen correlations must be absent between observer and object, in order for a quantum eigenstate to materialize (Primas, 1981). Strong magnetic fields applied to the brain conceivably induce quantum-mechanical correlations between substructures of the brain and the spins of external particles.

According to the theory mentioned, this might generate observable effects. The extreme possibility — presently not disproven — would be the occurrence of major macroscopic changes in the structure of the world, when a subject is handed over the control of the knobs on a nuclear-magnetic-resonance machine. Is it conceivable that quantum mechanical changes induced in the brain can be used as a kind of relativistic flight simulator?