

Title: The Consciousness Causes Collapse Hypothesis in Quantum Mechanics

Jose Acacio de Barros, SFSU

Abstract:

In this talk we explore the idea that the quantum collapse of the wave function may be connected to the presence of a consciousness, or the consciousness causes collapse hypothesis (CCCH). We will show that any attempt to directly falsify this hypothesis would be doomed, under some reasonable assumptions about consciousness beings. However, we will also discuss other indirect consequences of the CCCH, in particular a model that uses the inverse quantum Zeno effect to use the CCCH as a way for the mind to affect quantum states. If those models are correct, they entail certain predictions for neural structures that could be confirmed or falsified.