

Abstract Submitted
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Simulation and Visualization of the Predictable Parts of the Schrodinger Cat Experiment. GODFREY AKPOJOTOR, Delta State University, Abraka, Nigeria — The parts when the poison is released and its effects in the Schrodinger Cat experiment are modeled in this study as a simple harmonic oscillator using the usual various steps of modeling. The emerging second order differential equation with constant coefficients has three key components: the damping constant, b which is the amount of poison the cat is exposed to, the spring constant, k , which is the pumping of the blood in the cat's heart and the mass, m of the cat. Python codes and VPython codes were then used to resolve the differential equation to obtain both the numerical and simulated results. It is observed in both results that by varying the amount of poison, pumping of the blood in the heart and the mass of the cat, one can predict the following three states: (a) underdose: producing normal sinusoidal motion (b) critical dose: producing abnormal sinusoidal motion and (c) overdose: producing quenched sinusoidal motion.

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