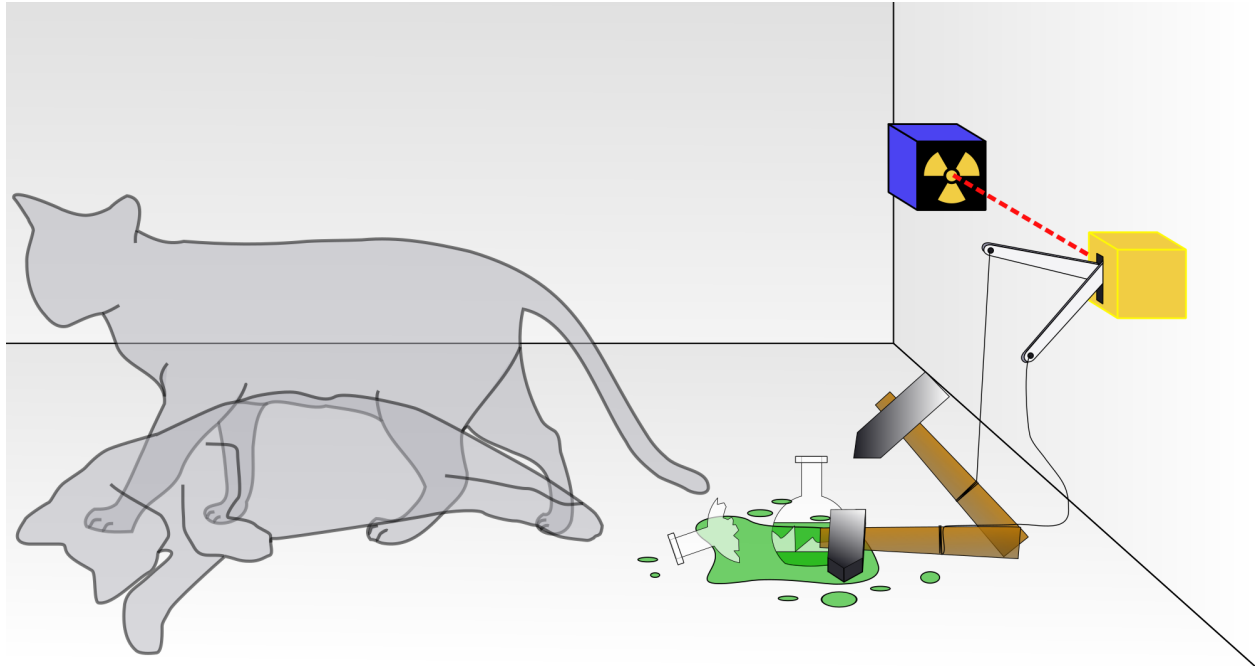


Schrodinger's Cat Experiment:

Schrodinger's Cat experiment is a hypothetical experiment that places a cat in a box with a flask filled with poison. If the flask is broken then the cat is both dead and alive and it is not until the observer looks into the box that it is known if the cat is dead or alive. This experiment made us question when is something in superposition and when does it stop being in superposition? Many interpretations have been made about this.



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Schrodinger's Cat Experiment not only lets us use superposition in quantum computing but also measurement.

Measurement:

Without measurement there is no way to tell the outcome of the state whether it is a 0 or 1. Once we measure a state we can't do any more operations on it because the state is known and no matter the operation that state will be the same even if it is entangled with another qubit after measurement. We currently use a classical computer to measure the state using different techniques depending on the hardware. This measurement is the observer in the Schrodinger's Cat experiment.