Review of: "Determining When Schrödinger's Cats Die"

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Difficult to tell why Schrödinger chose a cat for this purpose, but it may be a method to gain attention to the problem that highlights a fundamental topic of quantum mechanics. Since this is a thought experiment "Gedankenexperiment" it may be impossible to perform it in reality. Any attempt to do so will not resolve the issue at hand but merely end up with tireless discussions of experimental details. Schrödinger proposed this thought experiment to show that there might be issues with quantum mechanics that need to be dealt with and to demonstrate the differences between classical mechanics and quantum mechanics.

The interesting feature of quantum mechanics is that the cat can be both alive and dead at the same time with a certain probability, but it will be only alive or dead when we perform the measurement, as it was pointed out by the comments to the wavefunction.

The figures 1 and 2 indicate that it is impossible for the cat to stay alive for more than two hours but that seems to avoid the idea of randomness in the experiment(?). Although unlikely, the cat might be alive after 3 hours. In the figures was also indicated that the probability of the cat's demise decreases after one hour but that should be changed to 'cat alive'.

The article points out an important problem in metrology, which is related to the understanding of precision and accuracy. Precision does become much better when more measurements are performed, but that is not the case for accuracy. The time of the demise of the cat is what it is, but that time can only be probed with a certain level of precision that, by the way, is also limited according to mechanisms of quantum mechanics. Even if the uncertainty were very large, the time of the demise of the cat would be correct, but not very precise. Accuracy may also improve, but that would require many independent series of measurements to determine the consensus time of the cat's demise. In case of real experiments, the calibration is also important but calibrations to thought experiments may not be relevant.

The precision is limited by the conditions of Heisenberg"s uncertainty relation that states time and place cannot be determined at infinite precision simultaneously. By the mere action of performing a measurement, the whole system is influenced by that measurement such that the information about position vanishes when the information about time is determined beyond a certain point of lower level of precision and vice versa. That is, when the precision of time of death increases, the information of the position of the cat vanishes. Thus, the cat may evade spending one of its nine lives on this experiment.