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

Michele Renda¹

1 CERN

Potential competing interests: No potential competing interests to declare.

First of all, I do not have the right competence to properly peer-review this article.

The points that, according to me, are unclear:

- 1. Why do you choose a triangular transition probability in Fig. 1 ? There is no specific reason why the decay probability has this shape. It should be made clear in the text if it is just for exemplification reasons.
- 2. In an actual decay experiment, there is no certainty that after the hours, the atom has performed a decay (for this reason, we speak of half-life, when half of the samples have completed a transition. After the first hour, the situation is again like the beginning (with only half of the atoms).
- Fig.1 is the decay probability or the cumulative decay probability? (a cumulative decay probability, e.g., the likelihood that the atom has performed a decay, is a monotonically non-decreasing function, so I assume it is not the case). However, a non-cumulative decay probability (the probability that the decay happens precisely at a given time) is quite tricky to define: it should be better explained in the text to be clear what is representing fig. 1.
- 4. The conclusion seems to be quite rushed. I believe an article should also have a teaching value for someone with good knowledge about the area but not the specific topic. The conclusion seems quite synthetic and needs to be clarified.