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## Phys 453 project

Intereptation of quantum mechanics

Why quantum mechanics is so weird?

This question has bother you, the same way it bothered all the great minds that worked and still working on quantum theory, but no conclusive answer yet! Perhaps one day you will be working on one! There are many possible interpretations of quantum mechanics, more accurately interpretations of the 'wavefunction collapse' or quantum measurement problem. However, the physics community seems not to agree on a particular one. Hence, quantum measurement problem is considered the most outstanding problem not just in physics, rather in the totality of science! There are some selected articles about this problem, summarise your understanding on them in the following points

- 1. Definition of quantum measurement problem
- 2. Overview of the different interpretations
- 3. You opinion on what interpretation you think is true, explain your answer

You should include the references in your project

- Lazarou, Dimitris. "Interpretation of quantum theory-An overview." arXiv preprint arXiv:0712.3466 (2007) https://arxiv.org/abs/0712.3466.
- o Omnes, Roland. The interpretation of quantum mechanics. Princeton University Press, 1994.

Best Regards,

Dr Salwa Alsaleh