Comments

Luc: "

This is very well written and in depth. I learned a lot reading it. The visual of the rabi oscillation on the bloch sphere is something i've never seen before.

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11/28 12:31 p.m. Ribhu Kaul

I also add a comment (not grading, it's just to make your presentation even better!):

Great work and explanation! There are some minor details that I found (actually, the only one that I remember so far is on the second page, right column, where it says "frequency 2\tau", but I understand \tau has no units of frequency)

11/30 11:06 p.m. Ricardo Javier Cabezon Heitzer

It was really amazing and i really liked reading it.
I would say that when i was reading it, i felt that i was reading a book as each term was explained in detail manner which also contained a figure or mathematical equations which helped me learn something new and there was a lot of new information for me. The equations were not just written but their derivations were also given and each step was marked with a number which helped me go back to the particular equation if needed and helped me understand how the final equation came. I thought a lot of effort was taken to do this write up which was also of five pages so i will give it an A.
The document is presented really well and each figure has a little descriptions which helps me understand the relationship between the description and the figure. The subject i felt was about trapped ions and how they carry information which means they are moving and that is why the motion of those trapped ions was talked about and when they are in motion, energy and potential comes into play which was really talked clearly and explained properly. The peer also showed that each ion act as a qubit so all the properties of qubits and all the gates could be used to explain how the ions can be measured but the equations used were very much new for me and those equations were derive like we use to derive equations in math with each step so i would give A.
To be honest i feel this write up is perfect and no need for improvements.

12/2 12:45 p.m. Anonymous User

Hi Lucas,

First of all, thanks for taking the time to produce this nice write-up and putting yourself out there for the discussion. Even if it was a bit unnerving in the short term, I hope you find that the experience in your own discussion and watching the other discussions is helpful in the long term.

As we discussed in class your write-up has been carried out very well and I am happy that you have clearly learned many new things.

It has been a pleasure to get to know you and teach you. I wish you all the best for your future endeavors!!

Ribhu

12/7 1:30p.m. Ribhu Kaul

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1. A. There is a lot of information presented in this project, to a great level of depth. The visuals helpl build on the concepts being expressed, and a lot of technical content is included, mostly focusing on equations and derivations of results.

2. A. The LaTeX formatting is very good, and the visuals used in the paper add to its quality greatly. The document is formatting in a very professional manner, making it easy to read and to learn from.

3. There is not much to improve in this project. The colon (":") at the beginning of the subtitle seems strange and out of place, but this might be standard for the format you're using, so I can't say whether or not it should be removoed. Since there is so much information being presented, the paper might benefit from a full introduction, rather than just an abstract, as it's likely that readers won't know what they're even going to be learning until the end of the project. The abstract is written very well, yes, but it doesn't indicate the full scope of the paper, as a full introduction with a short overview--at least a sentence or

two--on each section of the paper would do. That is my main recommendataion for improvement.

12/8 12:58 p.m. Anonymous User

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1. Depth of Learning/Effort: A

It's clear that Lucas has put a large amount of effort into this project. While some of the information is likely learned from other classes (such as the Hamiltonian), or from this class (the Bloch Sphere), most of the information is likely new information learned during this project. Or, at the very least, it's not information I've encountered!

2. Presentation: B

The document has a clean layout, with many aiding diagrams. There are some grammatical or phrasing mistakes that make it slightly difficult to parse the meaning in certain cases. I'd probably give a B+ or an A- if those were options, as this is overall still very good.

3. Suggestions.

There are no major changes that are required; however, some editing would be useful. For instance, the Doppler Cooling section could be rewritten to be more clear. Also, under single-qubit gates, the nature of the laser pulse is unclear due to grammar; is it A laser pulse, or is it laser pulseS? (from context I'm pretty sure it's just one, but more clarity is always better.) Not every section has any problem, so this shouldn't be too big of an effort to fix.

12/8 5:57 p.m. Anonymous User
