Joey's Lab Report Template

J. Liang (z1234567)[1, 2]
[1] *Cohort A - Mon 9-12 class*
[2] *Word count: XXXX words*
(Dated: 14:14 Monday 14th June, 2021)

I would have a succinct (1-2 sentence statement) of the aim in here. And then I would also have a succinct (1-2 sentence statement) of the key conclusion. That is all, keep it simple, it's so a reader can quickly get at your two key points.

INTRODUCTION

This is where I would have some discussion of the general background of your experiment. What are the basic ideas of the topic? What is the question you are setting out to address with this experiment? What are the key underpinning theoretical or experimental results you build on? The assumed knowledge should not exceed the level of a fellow student in your class. Citations to references should be included, and using the literature well is encouraged.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum. Hello, here's a citation (Jones and Smith 2013), and a little split off equation:

$$E = mc^2 \tag{1}$$

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Here's how to fit in a huge equation if you wanna, and another cite (Smith and Jones 2012):

$$I_o = \sin^2\left(\frac{2\pi}{\lambda_{\text{ex}}}\Big(n_o(z_o - z_p) + n_w h_o\Big)\right)\sin^2\left(\frac{2\pi}{\lambda_{\text{em}}}\Big(n_o(z_o - z_p) + n_w h_o\Big)\right) \tag{2}$$

$$I_p = \sin^2\left(\frac{2\pi}{\lambda_{\text{ex}}}\Big(n_o z_o + n_w h_o\Big)\right)\sin^2\left(\frac{2\pi}{\lambda_{\text{em}}}\Big(n_o z_o + n_w h_o\Big)\right) \tag{3}$$

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

AIM

This should be a succinct (1-2 sentence) statement of the aim of the experiment in your report. It does not need to match the lab documentation necessarily, it should be tailored to what you have chosen to focus on in your report and fit well to your conclusion. It should be similar to (or even match) the aim you state in your abstract.

METHOD

Should briefly summarise the key aspects of the experiment; the lab documentation can be used as references. In particular, it should note any aspects that differ or are not obvious in the lab documentation.

Figure 1. Doing a full width figure.

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

RESULTS & ANALYSIS

Should focus on the key aspects of your results and analysis. It does not need to be exhaustive; you can include a pdf scan of your experiment logbook notes as supplementary material in your final submission if you wish. That said, it should tell a clear story, connect well to the figures that you present, and sensibly justify your final conclusion. Any figure that appears in the results section should be explicitly discussed as part of the results; simply dumping figures onto the page is not good form.

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetuer.

Suppose you want to make a list:

i) First item.

ii) Second item.

iii) Third item.

Suspendisse vel felis. Ut lorem lorem, interdum eu, tincidunt sit amet, laoreet vitae, arcu. Aenean faucibus pede eu ante. Praesent enim elit, rutrum at, molestie non, nonummy vel, nisl. Ut lectus eros, malesuada sit amet, fermentum eu, sodales cursus, magna. Donec eu purus. Quisque vehicula, urna sed ultricies auctor, pede lorem egestas dui, et convallis elit erat sed nulla. Donec luctus. Curabitur et nunc. Aliquam dolor odio, commodo pretium, ultricies non, pharetra in, velit. Integer arcu est, nonummy in, fermentum

Figure 2. Schematic illustrating a famous physicist.

faucibus, egestas vel, odio.

Sed commodo posuere pede. Mauris ut est. Ut quis purus. Sed ac odio. Sed vehicula hendrerit sem. Duis non odio. Morbi ut dui. Sed accumsan risus eget odio. In hac habitasse platea dictumst. Pellentesque non elit. Fusce sed justo eu urna porta tincidunt. Mauris felis odio, sollicitudin sed, volutpat a, ornare ac, erat. Morbi quis dolor. Donec pellentesque, erat ac sagittis semper, nunc dui lobortis purus, quis congue purus metus ultricies tellus. Proin et quam. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Praesent sapien turpis, fermentum vel, eleifend faucibus, vehicula eu, lacus.

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Donec odio elit, dictum in, hendrerit sit amet, egestas sed, leo. Praesent feugiat sapien aliquet odio. Integer vitae justo. Aliquam vestibulum fringilla lorem. Sed neque lectus, consectetuer at, consectetuer sed, eleifend ac, lectus. Nulla facilisi. Pellentesque eget lectus. Proin eu metus. Sed porttitor. In hac habitasse platea dictumst. Suspendisse eu lectus. Ut mi mi, lacinia sit amet, placerat et, mollis vitae, dui. Sed ante tellus, tristique ut, iaculis eu, malesuada ac, dui. Mauris nibh leo, facilisis non, adipiscing quis, ultrices a, dui.

DISCUSSION

If you would like this as a section, feel free. This might be a place to distill your analysis down to some key points or make an argument with that analysis.Other (2014)

Morbi luctus, wisi viverra faucibus pretium, nibh est placerat odio, nec commodo wisi enim eget quam. Quisque libero justo, consectetuer a, feugiat vitae, porttitor eu, libero. Suspendisse sed mauris vitae elit sollicitudin malesuada. Maecenas ultricies eros sit amet ante. Ut venenatis velit. Maecenas sed mi eget dui varius euismod. Phasellus aliquet volutpat odio. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Pellentesque sit amet pede ac sem eleifend consectetuer. Nullam elementum, urna vel imperdiet sodales, elit ipsum pharetra ligula, ac pretium ante justo a nulla. Curabitur tristique arcu eu metus. Vestibulum lectus. Proin mauris. Proin eu nunc eu urna hendrerit faucibus. Aliquam auctor, pede consequat laoreet varius, eros tellus scelerisque quam, pellentesque hendrerit ipsum dolor sed augue. Nulla nec lacus.

Suspendisse vitae elit. Aliquam arcu neque, ornare in, ullamcorper quis, commodo eu, libero. Fusce sagittis erat at erat tristique mollis. Maecenas sapien libero, molestie et, lobortis in, sodales eget, dui. Morbi ultrices rutrum lorem. Nam elementum ullamcorper leo. Morbi dui. Aliquam sagittis. Nunc placerat. Pellentesque tristique sodales est. Maecenas imperdiet lacinia velit. Cras non urna. Morbi eros pede, suscipit ac, varius vel, egestas non, eros. Praesent malesuada, diam id pretium elementum, eros sem dictum tortor, vel consectetuer odio sem sed wisi.

CONCLUSIONS

You should finish with a succinct (1-2 sentence) statement of your key finding. It should be similar to (or even match) the conclusion you state in your abstract.

ACKNOWLEDGEMENTS

The original template of this lab report was put together by Prof. A. P. Micolich from School of Physics, UNSW.

Jones, A. B. and Smith, J. M. (2013), 'Article Title', *Journal title* **13**(52), 123–456.
Other, A. N. (2014), *Book Title*, 10th edn, Publisher.
Smith, J. M. and Jones, A. B. (2012), *Book Title*, 7th edn, Publisher.

APPENDIX

The following is an example of a piece of Python code that will crash your computer

```
for i in range(sys.maxint):
    print("Hello World")

'''Please Don't actually run this code lmao'''
```