

# **This is a Very Important Title!**

Person McSomething  
(Dated: October 5, 2020)

Characterizing objects within far remote solar system is beyond the reach of telescopic methods. However, examining properties of the light emitted from the star can give information of orbiting planets. I have here examined variation in the wavelength of the H-alpha spectral line of five stars to determine existence of orbiting planets and further characterize their properties. Changes in wavelength caused by the doppler effect was used to estimate radial velocity of the star with respect to its centre of gravity. Potential eclipsing planets was determined by change in flux. These data were further used to estimate the mass of planets and to create models of the planet's radial velocities. The model was obtained by fitting a sine function to the data using the least squared method. I discovered orbiting planets around four of the stars. Two showed eclipse, which enabled estimates of the mass and radial velocity. Star 1 had mass of.. and mass of ... . star 3 ... In the two non-eclipsing stars only a lower bound of the mass and velocity can be estimated. These were... I also examined the eclipse data with the goal of revealing the planets radius, however, the time resolution was too low. Hence, the density of the planets could not be estimated. Noise???

## **I. INTRODUCTION**

## **Appendix A: Name of appendix**

## **II. THEORY**

This will be the body of the appendix.

## **III. METHOD**

## **Appendix B: This is another appendix**

## **IV. RESULTS**

Tada.

## **V. DISCUSSION**

## **VI. CONCLUSION**

## **ACKNOWLEDGMENTS**

I would like thank myself for writing this beautiful document.

## **REFERENCES**

- Reference 1
- Reference 2

Note that this document is written in the two-column format. If you want to display a large equation, a large figure, or whatever, in one-column format, you can do this like so:

This text and this equation are both in one-column format.  
[? ]

$$\frac{-\hbar^2}{2m}\nabla^2\Psi + V\Psi = i\hbar\frac{\partial}{\partial t}\Psi \tag{B1}$$

Note that the equation numbering (this: B1) follows the appendix as this text is technically inside Appendix B. If you want a detailed listing of (almost) every available math command, check: <https://en.wikibooks.org/wiki/LaTeX/Mathematics>.

And now we’re back to two-column format. It’s really easy to switch between the two. It’s recommended to keep the two-column format, because it is easier to read, it’s not very cluttered, etc. Pro Tip: You should also get used to working with REVTeX because it is really helpful in FYS2150.

One last thing, this is a code listing:

```
This will be displayed with a cool programming font!
```

You can add extra arguments using optional parameters:

```
This will be displayed with a cool programming font!
```

You can also list code from a file using `\lstinputlisting`. If you’re interested, check [https://en.wikibooks.org/wiki/LaTeX/Source\\_Code\\_Listings](https://en.wikibooks.org/wiki/LaTeX/Source_Code_Listings).

This is a basic table:

Table I. This is a nice table

Hey	Hey	Hey
Hello	Hello	Hello
Bye	Bye	Bye

You can a detailed description of tables here: <https://en.wikibooks.org/wiki/LaTeX/Tables>.

This is a more advanced table:

Table II. Tabelleksempel

Partikkelindeks (i)	Posisjon (m)	Hastighet (m/s)
0	139.22	12.4
1	14.88	18.7
2	233.9	10.10
3	816.12	13.4

I’m not going to delve into Tikz in any level detail, but here’s a quick picture:

If you want to know more, check: <https://en.wikibooks.org/wiki/LaTeX/PGF/TikZ>.

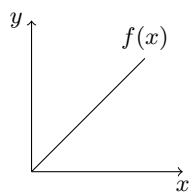


Figure 1. This is great caption