

My Report or Thesis Title

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## Abstract

...this is the abstract text...

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## 1 Introduction

This is my first citation (1).

**Hello, how are you?** *I am ok, thank you!*

## 2 Methods

### 2.1 Equations

The energy in the rest frame of the mass is given by Equation 1.

$$E = m_0 c^2 \quad (1)$$

Alternatively the relativistic equation  $E^2 = (pc)^2 + (m_0 c^2)^2$  relates energy to momentum and rest mass.

### 2.2 Bullet lists

My list of unordered points are as follows:

- item A
  - sub-item A
  - sub-item B
- item B
- item C

My list of ordered points are as follows:

1. item A
  - sub-item A
  - sub-item B
2. item B
  - a. sub-item A
  - b. sub-item B
3. item C

## 3 Results

### 3.1 R-code chunk

Run a linear model (*lm*) on the data *iris* data using the following code chunk.

```
##  
## Call:  
## lm(formula = Petal.Width ~ Petal.Length, data = iris)  
##  
## Residuals:  
##      Min       1Q   Median      3Q      Max  
## -0.56515 -0.12358 -0.01898  0.13288  0.64272  
##  
## Coefficients:  
##                         Estimate Std. Error t value Pr(>|t|)  
## (Intercept) -0.363076  0.039762 -9.131  4.7e-16 ***  
## Petal.Length  0.415755  0.009582 43.387 < 2e-16 ***  
## ---  
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1  
##  
## Residual standard error: 0.2065 on 148 degrees of freedom  
## Multiple R-squared:  0.9271, Adjusted R-squared:  0.9266  
## F-statistic: 1882 on 1 and 148 DF,  p-value: < 2.2e-16
```

### 3.2 R-code inline

The number of iris species is 3.

### 3.3 Images

See Figure 1 for image of Painted Lady!



Figure 1: Painted Lady butterfly copyright Alison Hale

### 3.4 Figures

Histograms of iris petal width are given in Figures 2 and 3.

Scatter plots iris petal dimensions are given in Figures 4 and 5.

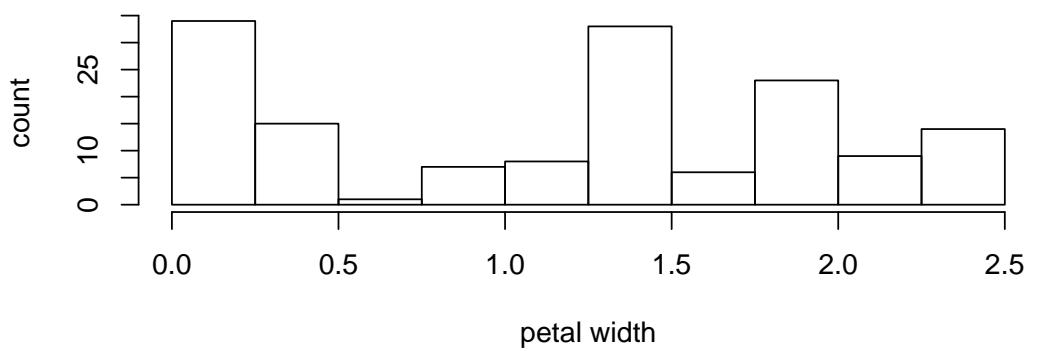


Figure 2: First histogram of petal width

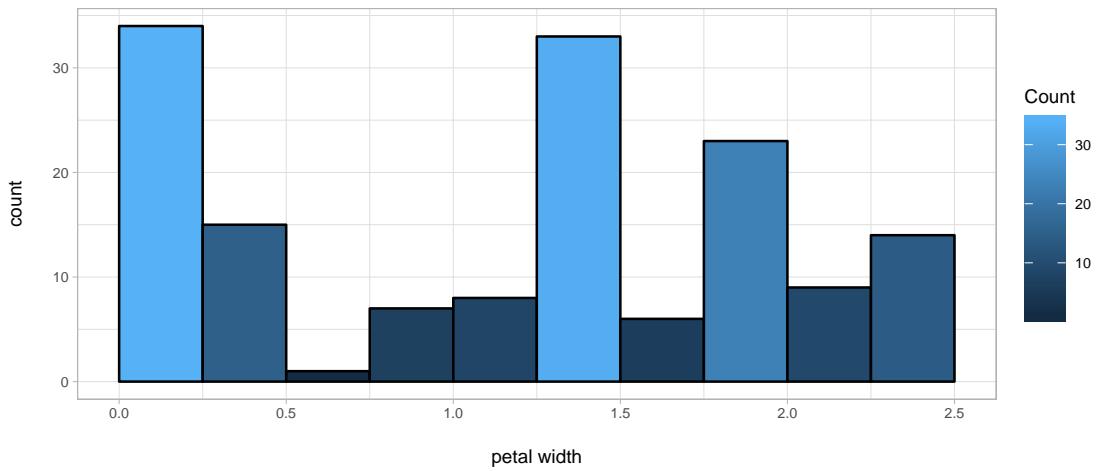


Figure 3: Second histogram of petal width

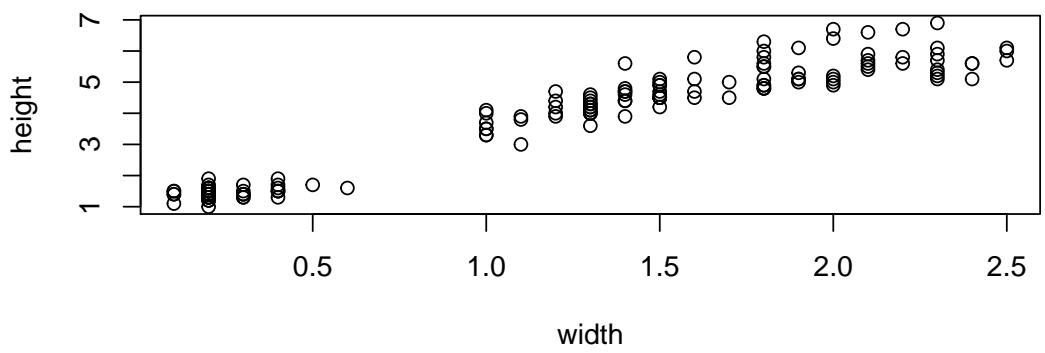


Figure 4: First scatter plot of petal width and height

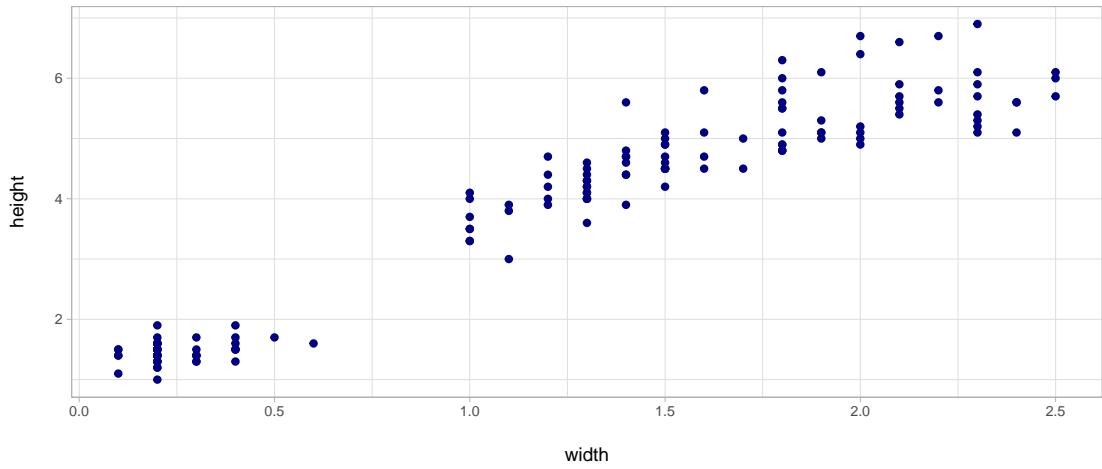


Figure 5: Second scatter of petal width and height

### 3.5 Tables

The first ten lines of the iris data can be found in Table 1.

Table 1: Iris data

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.1	3.5	1.4	0.2	setosa
4.9	3.0	1.4	0.2	setosa
4.7	3.2	1.3	0.2	setosa
4.6	3.1	1.5	0.2	setosa
5.0	3.6	1.4	0.2	setosa
5.4	3.9	1.7	0.4	setosa
4.6	3.4	1.4	0.3	setosa
5.0	3.4	1.5	0.2	setosa
4.4	2.9	1.4	0.2	setosa
4.9	3.1	1.5	0.1	setosa

Landscape table using the first twenty lines of the iris data can be found on the next page in Table 2.

Table 2: Iris data

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Sepal.Length	5.1	4.9	4.7	4.6	5.0	5.4	4.6	5.0	4.4	4.9	5.4	4.8	4.8	4.3	5.8	5.7	5.4	5.1	5.7	5.1
Sepal.Width	3.5	3.0	3.2	3.1	3.6	3.9	3.4	3.4	2.9	3.1	3.7	3.4	3.0	3.0	4.0	4.4	3.9	3.5	3.8	3.8
Petal.Length	1.4	1.4	1.3	1.5	1.4	1.7	1.4	1.5	1.4	1.5	1.5	1.6	1.4	1.1	1.2	1.5	1.3	1.4	1.7	1.5
Petal.Width	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.4	0.4	0.3	0.3	0.3
Species	setosa																			

## 4 Conclusion

We described methods in Section 2 and plotted the results in Section 3.4. Supplementary material is in Appendix A.1.

## References

1. Hale AC, Tucker RW. Covariant hysteretic constitutive theory for maxwell's equations: Application to axially rotating media. *Philosophical Magazine*. [Online] 2014;94(6): 594–610. Available from: <https://pdfs.semanticscholar.org/7ee7/4ffed17e3d58d8c9efdbf5a5611755c4ad37.pdf>

# **Appendix**

## **A.1 Landscape pages**

Figure 6 is on a landscape page.

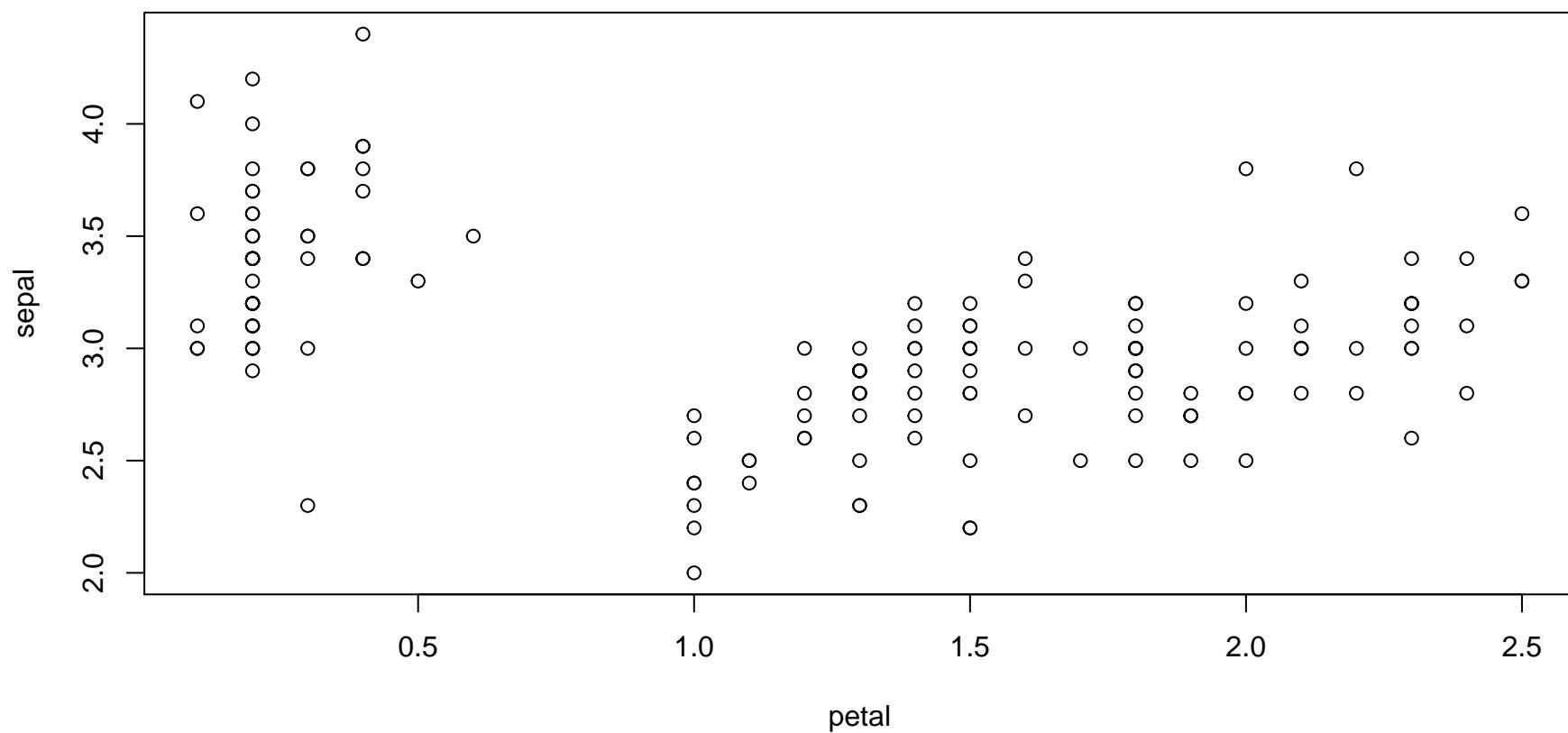


Figure 6: petal versus septal width

## A.2 Supporting code