



MAX-PLANCK-GESELLSCHAFT

# STATISTICAL ANALYSIS OF BEHAVIORAL DATA

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## RMarkdown+Latex

This is simple an R Markdown document to show MPIThemes features. use # sign to define chapter. For definition sub chapter add ## to first line and add name of sub chapter.

### Code Embedding

speed	dist
Min. : 4.0	Min. : 2.00
1st Qu.:12.0	1st Qu.: 26.00
Median :15.0	Median : 36.00
Mean :15.4	Mean : 42.98
3rd Qu.:19.0	3rd Qu.: 56.00
Max. :25.0	Max. :120.00

We can run inline R code  $2^{10}=1024$

### Markdown

In RMarkdown we can use markdown syntax, such as unordered list items

- item
- item
- more item

Or use block quotes are written after >, e.g.,

To be, or not to be, that is the question!

### Latex

We can easily write math expressions by latex syntax. Inline LaTeX equations can be written in a pair of dollar signs

$$f(k) = \binom{n}{k} p^k (1-p)^{n-k}$$

## plot

By using ggplot package, we can

```
ggplot(iris, aes(Sepal.Length, Petal.Length)) +  
  labs(subtitle="Iris Data: Sepal Length vs Petal Length",  
        title="Bubble chart") +  
  geom_jitter(aes(col=Species, size=Sepal.Width)) +  
  geom_smooth(aes(col=Species), method="lm", se=F)+  
  theme_bw()+  
  scale_color_mpi()
```

### Bubble chart

Iris Data: Sepal Length vs Petal Length

