

Rmd Beamer Example

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Example of Beamer Slides from R Markdown

Outline

- ▶ Instructions
- ▶ An image
- ▶ Two R code chunks
- ▶ An equation typeset in LaTeX
- ▶ References

How to Create Beamer Slides from an Rmd file

- ▶ put title information in yaml prologue (optional)
- ▶ open a .term file and run these commands
- ▶ rendered view in Rmd editor may not look right - view the pdf file to see slides

```
$ R
> library(rmarkdown)
> render("filename.Rmd", beamer_presentation())
> quit()
$ open filename.pdf
```

Image

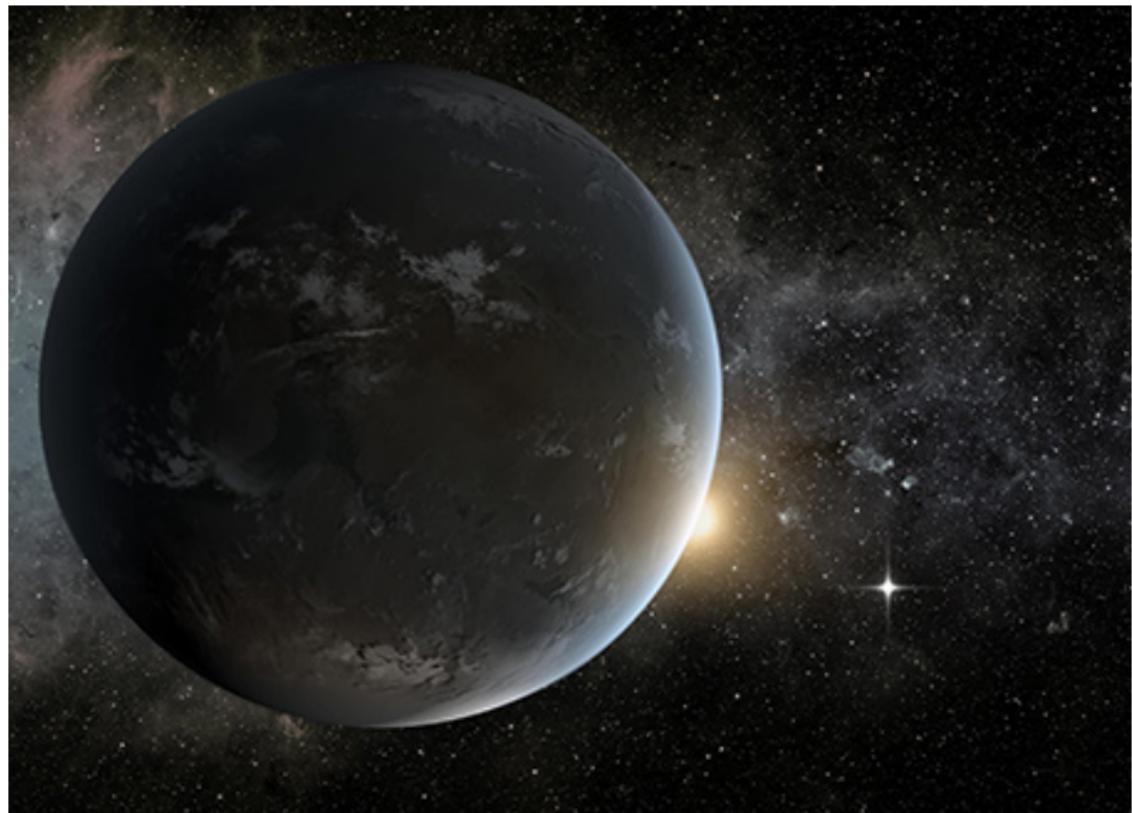


Figure 1: NASA Exoplanet Exploration Program

LaTeX

Radius of planet:

$$r_p = r_s \times \sqrt{\frac{\Delta B}{B}}$$

Radius of planet's orbit:

$$r = \sqrt[3]{\frac{GM_s P^2}{4\pi^2}}$$

R Code Chunk 1

Get Data

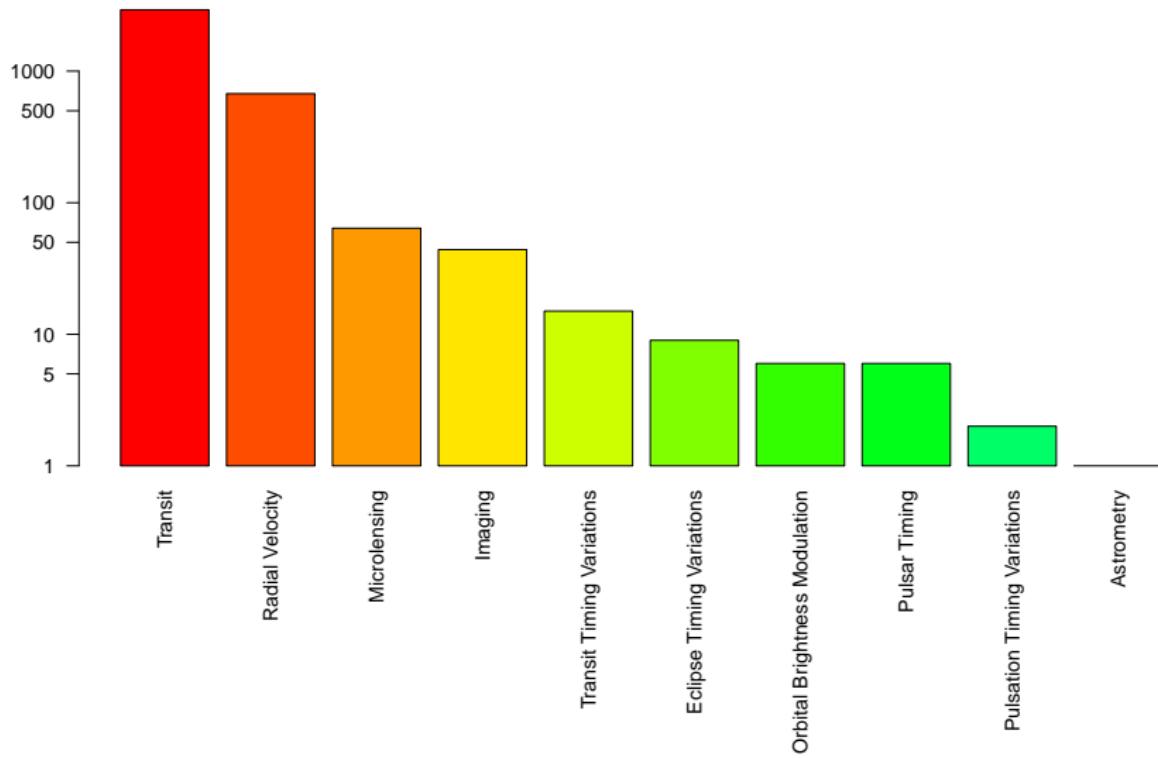
```
qry <- paste0("table=exoplanets&select=",
  "pl_hostname",
  "pl_letter",
  "pl_discmethod,pl_publ_date")
site <- paste0("http://exoplanetarchive.ipac.caltech.edu",
  "/cgi-bin/nstedAPI/nph-nstedAPI")
url <- paste0(site, "?", qry)
exo <- read.csv(url, stringsAsFactors=F)
exo$pl_discmethod <- as.factor(exo$pl_discmethod)
head(exo,3)
```

```
##   pl_hostname pl_letter   pl_discmethod pl_publ_date
## 1      HD 86081         b Radial Velocity    2006-08
## 2      HD 86226         b Radial Velocity    2010-03
## 3      HD 87883         b Radial Velocity    2009-10
```

R Code Chunk 2

Yield for different methods of discovery. Use log scale on vertical axis

Exoplanets Discovered vs. Method



References

Beamer User Guide

<http://tug.ctan.org/macros/latex/contrib/beamer/doc/beameruserguide.pdf>

R Markdown Presentations with Beamer

https://rmarkdown.rstudio.com/beamer_presentation_format.html

R function to create beamer slides

https://www.rdocumentation.org/packages/rmarkdown/versions/1.9/topics/beamer_presentation

NASA Exoplanet Exploration Program

<https://exoplanets.nasa.gov/alien-worlds/exoplanet-travel-bureau/>