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TITLE OF THIS DOCUMENT: A SUBTITLE  
THAT MAY FLOW ONTO ADDITIONAL SPACE  
IF NECESSARY

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## 1 Nuts and Bolts

### 1.1 DO NOT change the top part.

Leave the “output” section, font size, and that LaTeX stuff

```
1 output:
2   pdf_document:
3     keep_tex: true
4     fig_caption: true
5     latex_engine: pdflatex
6     template: crmda-boilerplate.tex
7     pandoc_args: [
8       "--listings"
9     ]
10  fontsize: 11pt
11  tables: true
12  preamble:
13  - \usepackage{xcolor}
14  - \usepackage{lipsum}
```

This is pretty standard and you shouldn’t change it. Some changes might be needed if you *ADD* LaTeX preamble statements, but don’t delete the ones we have.

### 1.2 DO please change Title, subtitle, your name

```
1 title: "My Fancy Rmd to PDF Document"
2 subtitle: "Made by yours truly!"
```

Include a title, a subtitle.

```
1 author:
2 - name: Paul Johnson
3   affiliation: Center for Research Methods and Data Analysis
4   description: Ze Director
5   email: crmda@ku.edu
```

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Someone's got to get credit for the wonderful report, right? If you're a graduate student, you can put that right in the description line. If you are not the CRMDA, then you might want to change the email line.

## 2 LaTeX Syntax is allowed

### 2.1 Equations

```
1 \[
2 \Sigma_{gt}=\Lambda_{gt}\Psi_{gt}\Lambda'_{gt}+\Theta_{gt}
3 \]
```

produces:

$$\Sigma_{gt} = \Lambda_{gt}\Psi_{gt}\Lambda'_{gt} + \Theta_{gt}$$

```
1 \[
2 f(y|N,p) = \frac{N!}{y!(N-y)!} \cdot p^y \cdot (1-p)^{N-y} = \{N\}\choose{y} \cdot p^y \cdot
3 \]
```

produces:

$$f(y|N,p) = \frac{N!}{y!(N-y)!} \cdot p^y \cdot (1-p)^{N-y} = \binom{N}{y} \cdot p^y \cdot (1-p)^{N-y}$$

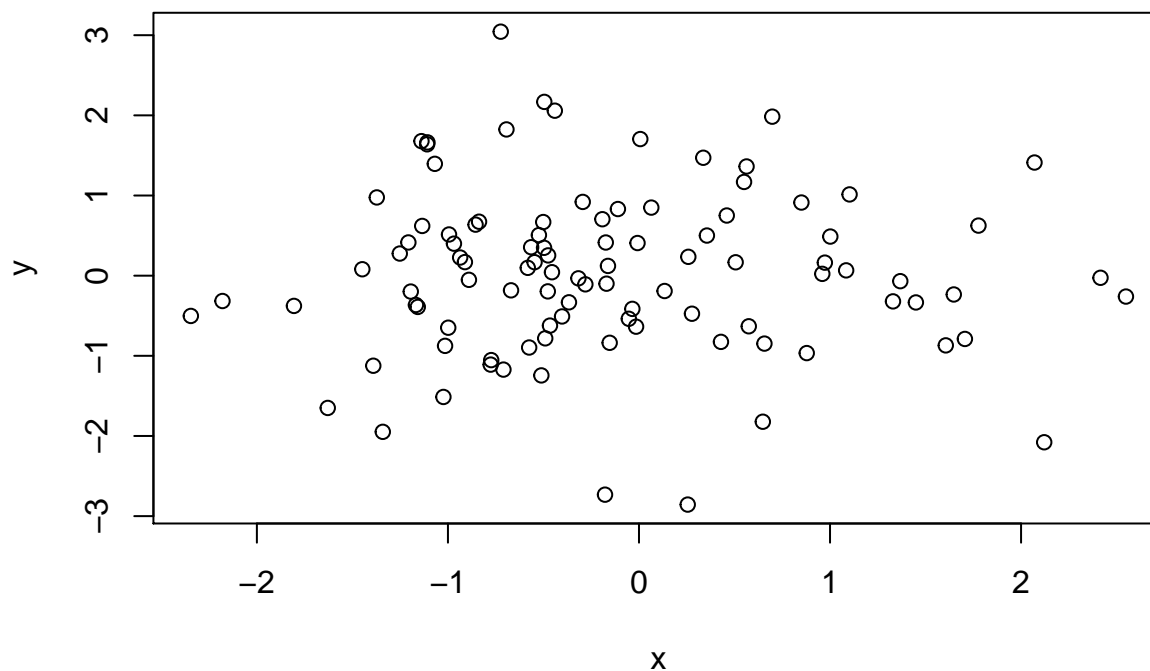
```
1 $\hat{y}=\beta_0+\beta_2x_i+\beta_3+x_j+\varepsilon_{ij}$
```

produces:

$$\hat{y} = \beta_0 + \beta_2x_i + \beta_3 + x_j + \varepsilon_{ij}$$

### 2.2 R code

```
1 ## This can be changed in the .tex preamble under lstset
2 set.seed(1234)
3 x <- rnorm(100, 0, 1)
4 y <- rnorm(100, 0, 1)
5 plot(x, y)
```



```
1 knitr::kable(head(data.frame(x, y)))
```

x	y
-1.2070657	0.4145235
0.2774292	-0.4747185
1.0844412	0.0659935
-2.3456977	-0.5024778
0.4291247	-0.8259986
0.5060559	0.1669893

```
1 z <- "A Character String"
```

```
1 library(xtable)
2 print(xtable(head(data.frame(x,y))), comment=FALSE)
```

	x	y
1	-1.21	0.41
2	0.28	-0.47
3	1.08	0.07
4	-2.35	-0.50
5	0.43	-0.83
6	0.51	0.17

```
1 library(rockchalk)
2 set.seed(2134234)
3 dat <- data.frame(x1 = rnorm(100), x2 = rnorm(100))
4 dat$y1 <- 30 + 5 * rnorm(100) + 3 * dat$x1 + 4 * dat$x2
5 dat$y2 <- rnorm(100) + 5 * dat$x2
6 m1 <- lm(y1 ~ x1, data = dat)
7 m2 <- lm(y1 ~ x2, data = dat)
```

Table 2: Still have showAIC argument, as in previous versions

	Whichever Estimate (S.E.)	Whatever Estimate (S.E.)
(Intercept)	30.245*** (0.618)	29.774*** (0.522)
x1	1.546* (0.692)	.
x2	.	3.413*** (0.512)
N	100	100
RMSE	6.121	5.205
$R^2$	0.048	0.312
adj $R^2$	0.039	0.305
AIC	650.109	617.694
* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$		

```

8 m3 <- lm(y1 ~ x1 + x2, data = dat)
9 gm1 <- glm(y1 ~ x1, family = Gamma, data = dat)
10 outreg(list("Whichever" = m1, "Whatever" = m2),
11          title = "Still have showAIC argument, as in previous versions",
12          showAIC = TRUE, float = FALSE)

```

	Whichever Estimate (S.E.)	Whatever Estimate (S.E.)
(Intercept)	30.245*** (0.618)	29.774*** (0.522)
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Here's the question: Is this report stationary better than what we had?

Lets get a team vote.

By the way, in case you wanted to see a giant copy of the logo, lets test the ability to insert a PDF graphic:

