Michelle's model

```
unem.ts = ts(unem.data$UNRATENSA, frequency = 12, start = c(1948,1))
unem.train.ts = window(unem.ts, end = c(2015,12))
unem.test.ts = window(unem.ts, start = c(2016,01))

y.lm = as.numeric(unem.train.ts)
t.lm = as.numeric(time(unem.train.ts))
mon.lm = as.factor(cycle(unem.train.ts))

dum.m = lm(as.numeric(unem.ts) ~ as.numeric(time(unem.ts)) + as.factor(cycle(unem.ts)))
summary(dum.m)
```

$$\left| \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} - \begin{pmatrix} -0.002955 & -0.0003424 \\ -59.89492 & -0.61689 \end{pmatrix} B - \begin{pmatrix} 0.1641 & -0.0002699 \\ -20.10760 & -0.48635 \end{pmatrix} B^2 - \begin{pmatrix} 0.1591 & -0.0001394 \\ -25.04746 & -0.24112 \end{pmatrix} B^3 \right|$$