

MSwM package

February 22, 2017

The package for implementing Autoregressive Markov switching model

```
msmFit(object, k, sw, p, data, family, control)
```

- **object**: formula of class “lm”
 - Dependent variable: *TotCpu%*
 - Independent variables: *RrcConnectionSetupComplete*, *X2HandoverRequest*, *Paging*, ... (a subset of components in *EventsPerSec*)
- **k**: Number of states (regime)
- **sw**: Switching coefficient
- **p**: Order of AR model
- **control**: a list of control parameters

```
model <- lm(`TotCpu%` ~ ., data)
msmFit(model, k=3, sw=rep(TRUE,length(model$coefficients)+1+1), p=1,
        control=list(trace=TRUE, parallelization=FALSE))
```

Output

- Parameter estimation
- State assignation
- Probability assign in each state
- Evolution of state assignation with probabilities

Modeling