# Aggregate Simulation model ARMA

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## Contents



# 1 Meeting Tasks to Study

- Propose the parametric space of the simulation study.

- Based on previous experience, very long time series can be problematic; a sample size of around 1000 data points may be more suitable for analysis.
- Review details about the ECG datasets already found and answer the question: Are these data already clustered/classified in the literature?
- Always bring validated, high-quality references and citations.
- Identify another possible dataset for clustering/classification.
- Browse carefully through http://www.timeseriesclassification.com.
- Create a benchmark for time series clustering using simulated data:
  - Explore different ARMA models (varying series lengths and parameters).
  - Investigate the "addition" of deterministic chaos.

```
summary(cars)
```

```
##      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
```

## 1.1 Including Plots

You can also embed plots, for example: