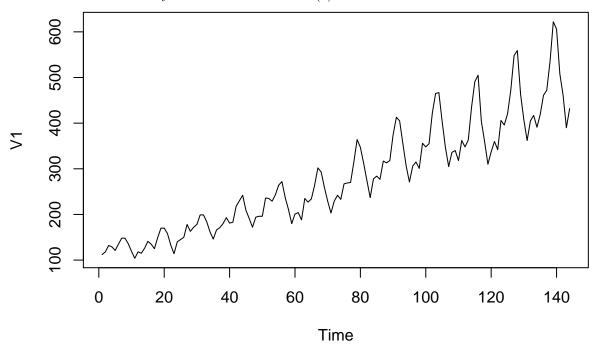
# TMA4285 Time series models

Exercise 8: Comparison of a state space model and a SARIMA model Sivert Selnes, Kristine L. Mathisen, Gina Magnussen 20th of October 2018

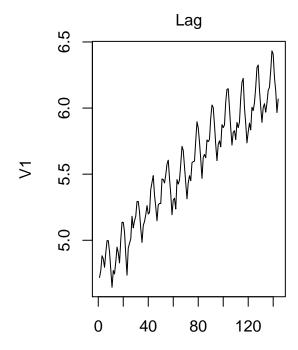
#### Remember:

• Note how uncertainty should be written: 0.056(7)



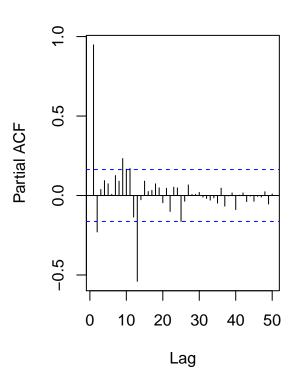


# ACF -0.2 0.0 0.2 0.4 0.6 0.8 1.0 0 10 20 30 40 20



Time

## Series dataseries



Theory is written here (in theory.Rmd)

### Tasks

- 1. Exploring the data with plotting of relevant statistics
- 2. Justification of the choice of model
- 3. Model parameter estimation including uncertainty
- 4. Model prediction at the given sample points and for the next year including uncertainty of the best linear predictions
- 5. Diagnostics, and model choice discussion including comparison of the two models

#### Structure

Title

Abstract

Introduction

Theory

- \* State-space models
- \* SARIMA

Data analysis

Discussion

Conclusion

Appendix

References