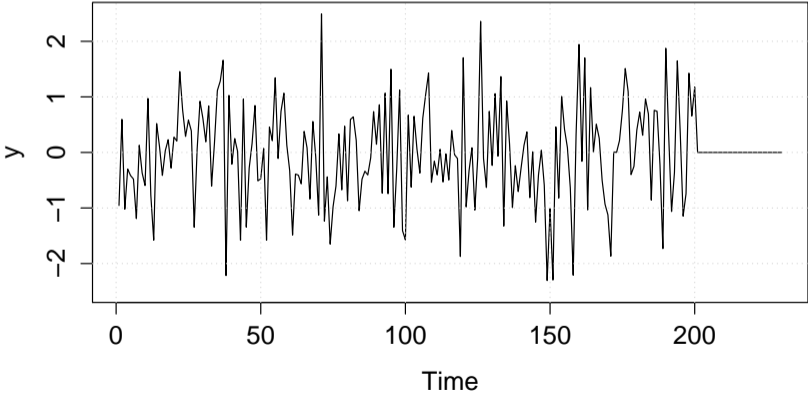


Seminar – summer 2026

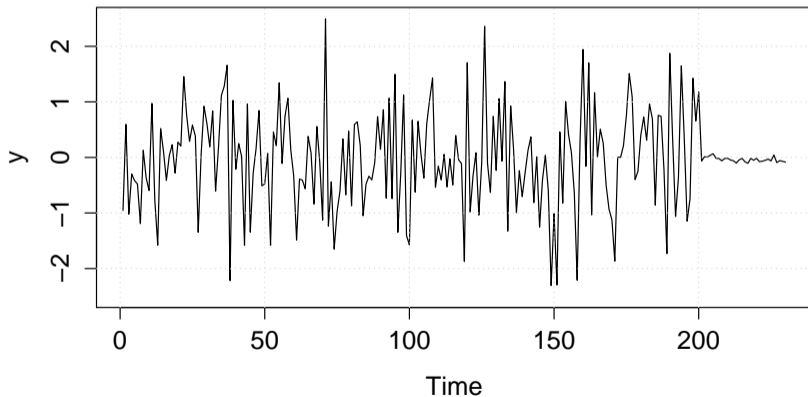
Forecasting in a data-rich environment

Prof. Dr. Matei Demetrescu

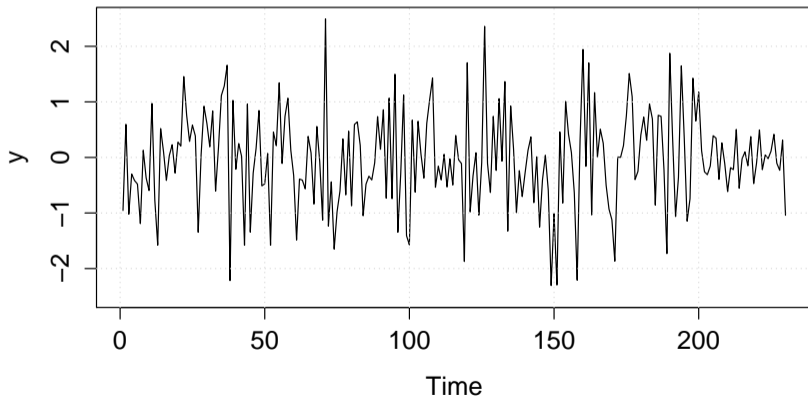
An unpredictable series



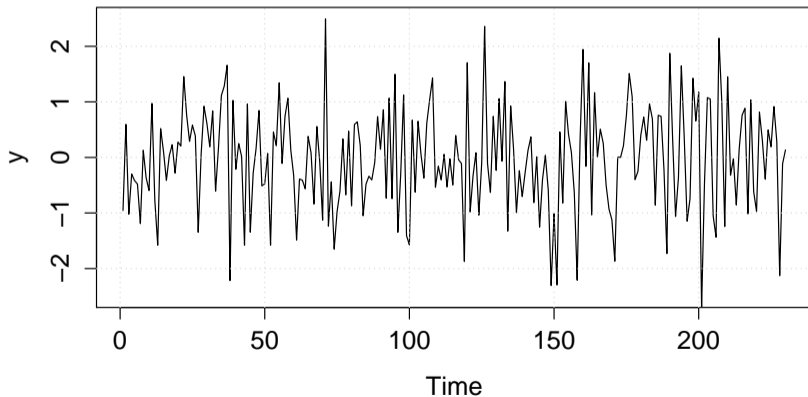
Two (irrelevant) predictors



Twenty (irrelevant) predictors



Hundred (irrelevant) predictors



Aims and scope

The seminar sets to get you acquainted with techniques that can deal with **many predictors**.

You will learn to

- acquire popular econometric methods from the literature,
- apply econometric techniques to an empirical question,
- relate your findings to the literature,
- present scientific results to an academic audience, and
- critically discuss the results of others.

Aims and scope cont'd

Intended audience

- Master Econometrics, Master Data Science, Master Statistics.

Prerequisites

- Time Series Analysis or Econometric Forecasting (or equivalent)

Structure

- In a first meeting, each participant is allocated one particular forecasting method such as factor models, LASSO, elastic net, boosting, and, if need be, Bayesian methods.
- We provide a data set and the details of the forecast experiment (Moodle, in due time) together with some literature.
- During the winter term, each participant writes a seminar paper (ca. 20 pages) that describes the forecasting method and applies it to the data set using a pseudo out-of-sample forecast experiment.
- In a block seminar, each paper is presented and discussed.

Milestones

- April 2026, exact date TBA: In-person meeting, QnA and allocation of topics.
- July 12th 2026: Deadline for electronic submission of the paper (pdf format) and the **R** codes.
- Presentation of the final results: TBA, but before the end of the lecture period.

Further details

Contact

- `mdeme@statistik.tu-dortmund.de`

Office hours

- by appointment; but before resorting to such desperate measures do not hesitate to ask simpler questions per email.

Summary

Study program	Credit for	General information	
B.Sc. Statistik	–	Instructor	Matei Demetrescu
M.Sc. Statistik	MS 4	Module requirements	TSA, Econometric Forecasting, or equiv.
B.Sc. Data Science	–	Place and Time	block seminar (July, details TBA)
M.Sc. Data Science	MD 4	Language	English
M.Sc. Econometrics	ME 6/7	First Date	in April, details TBA (moodle, LSF)
		Exam admission	none
		Type of examination	term paper, seminar presentation
		ECTS points	4

Binding registration until **25.02.2025** via the link in the mail from the dean's office.

Q & A

Any specific questions?