# Forecasting II

## General Information about the course

Faculty of Business and Economics,
University of Lausanne, Switzerland

# Course format - today

- A short lecture on an advanced model
  1. Generalised Additive Models
- Select your groups (Moodle)

# Course format - later

- Two group projects
- **Project 1**: forecast Swiss tourism
- **Project 2**: choose and analyse your own time series dataset

# Project 1

- Project guidebook available on Moodle
- Dataset on Moodle
- It comprises monthly data of arrivals in the hotel sector for open establishments, categorized by canton and visitors' country of residence. The dataset covers the period from 2005 to September 2023, providing a comprehensive historical perspective on tourism in Switzerland.
- You must produce a point forecast and a 95% confidence bounds for 1) the total number of visitors to Vaud from October 2023 to December 2024 and 2) (specific to each group) the total number of visitors to a specific canton and from a specific country of origin from October 2023 to December 2024
- Hand in a technical report (60%)

# Project 2

- Start thinking about datasets (ideas on Moodle)
- Not trivial, $>$ 500 time steps across several series
- Give a business-style presentation (40%)

# Organisation of the course I

- Wed. 12h30 — 16h00 for seven weeks
- In person, can also stream
- Slot on Wednesday afternoon

# Weekly schedule for projects

| **Week** | **Project 1** | **Project 2** |
|---|---|---|
| 17 April | Form Groups | Find your dataset |
| 24 April | Analysis | Discuss your dataset |
| 1 May | Analysis | Present your research question |
| 8 May | Analysis | Analysis |
| 15 May | Writing | Analysis |
| 22 May | Hand-in[1] | Analysis |
| 29 May | | Presentation |

[1] Tuesday, May 21th at midnight

# Groups

- Group formation link is on Moodle
- Pick your group wisely!
- These groups remain for Project 2

- Don't hesitate to ask questions:
  - Valérie Chavez-Demoulin: `valerie.chavez@unil.ch`
  - Juraj Bodik: `juraj.bodik@unil.ch`